Connecticut INDUSTRY

APRIL 1956

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Connecticut INDUSTRY

MANUFACTURERS' ASSOCIATION OF CONNECTICUT, INC.

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L. M. BINGHAM, *Editor*

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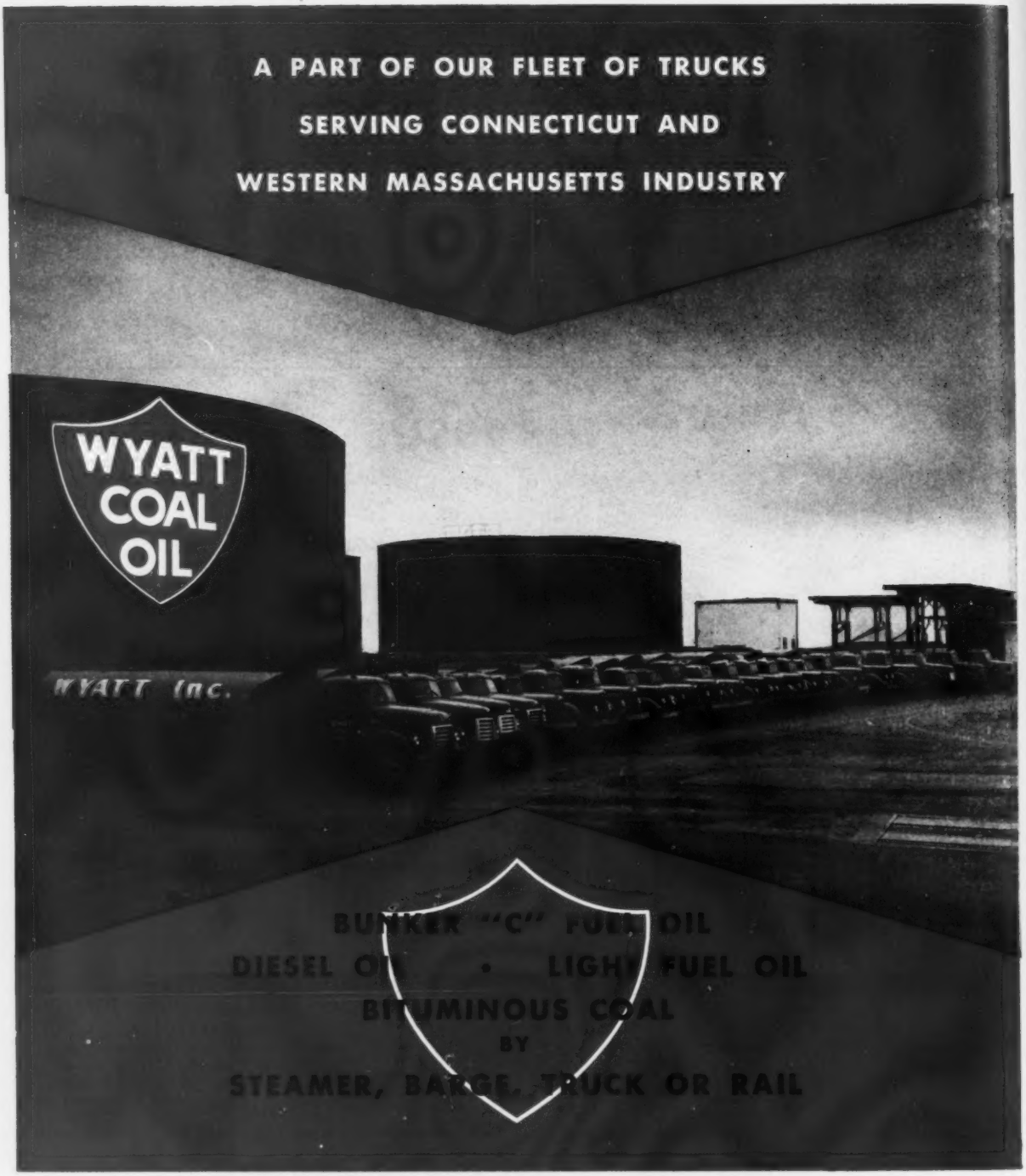

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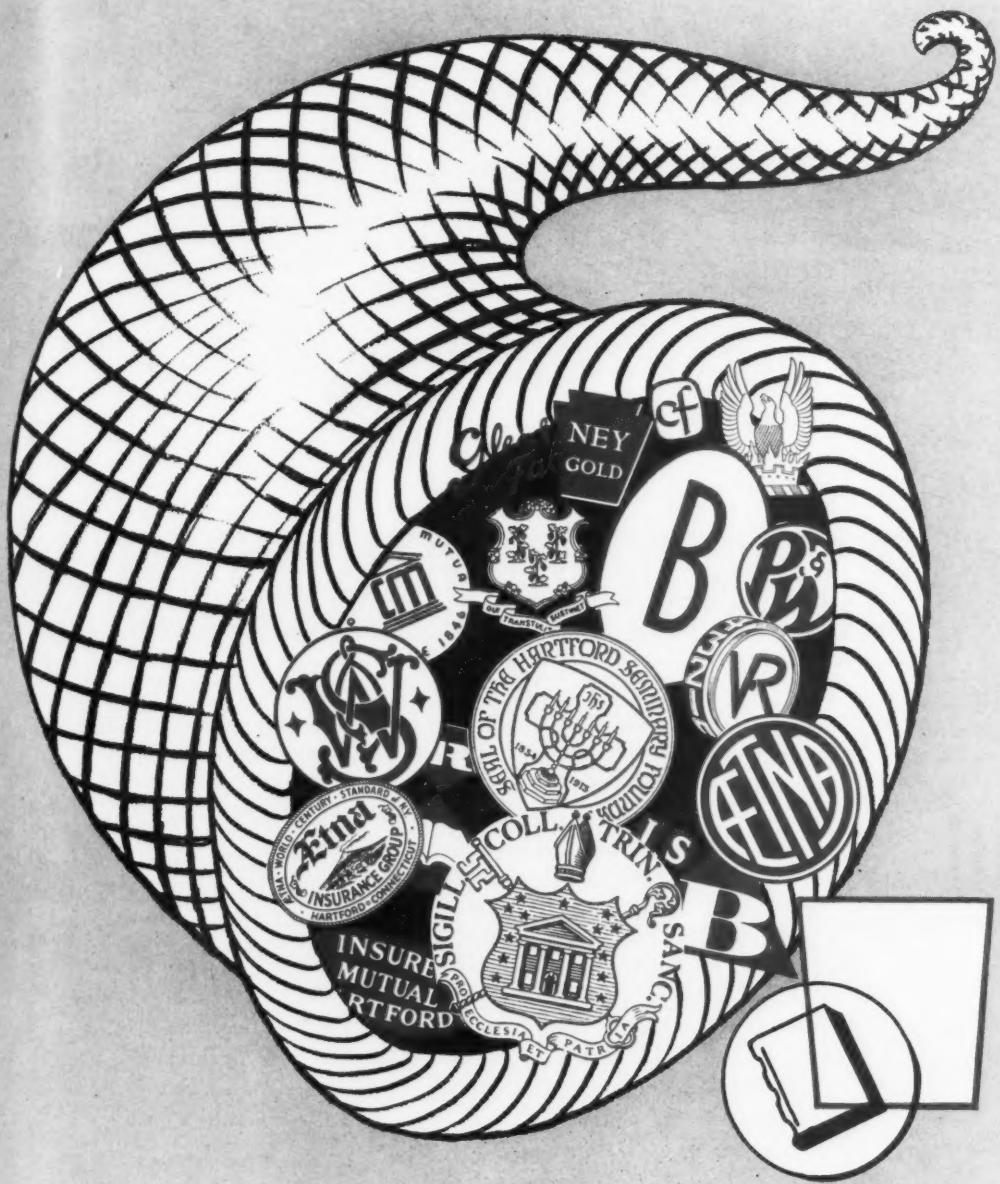

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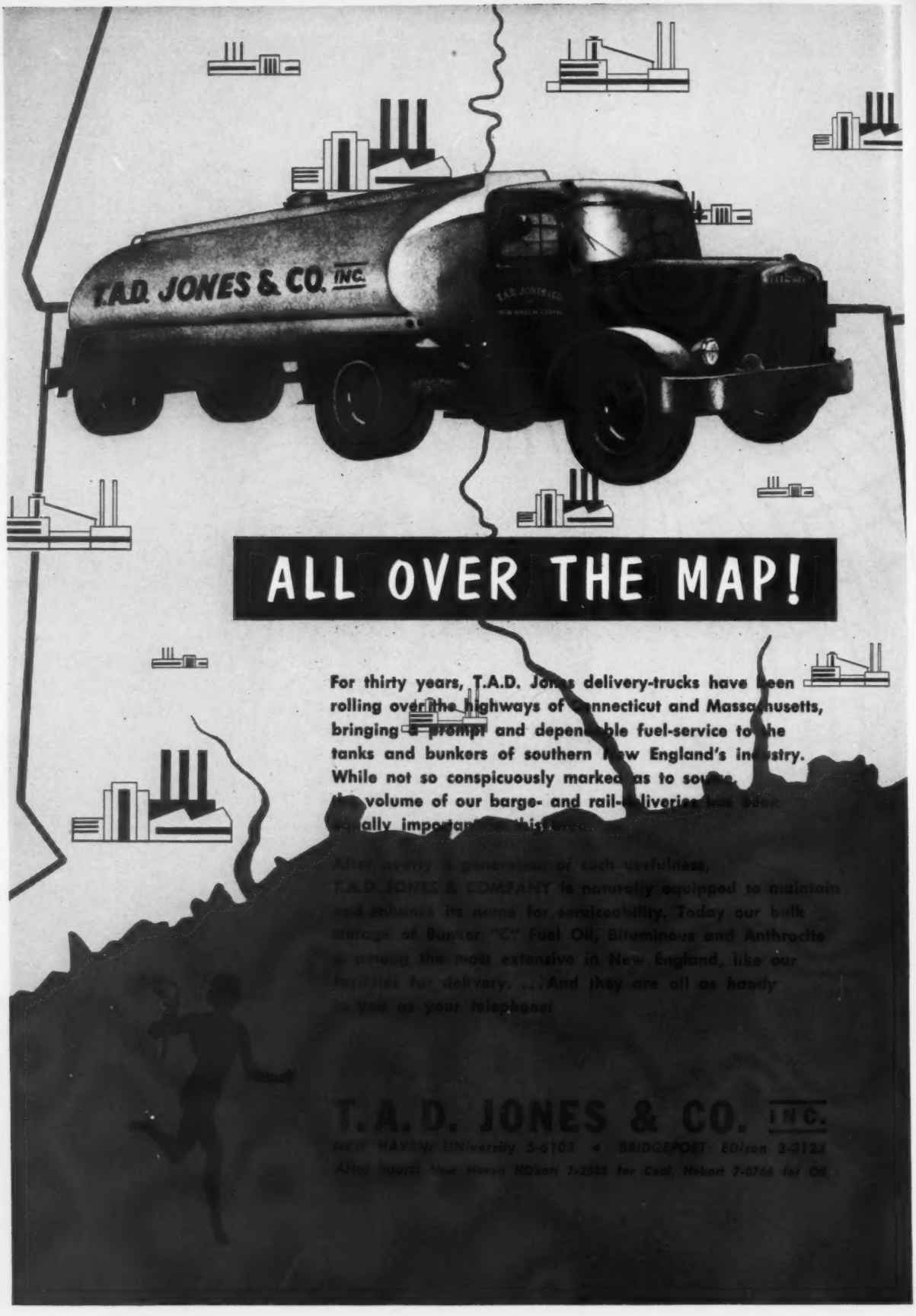

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The Responsibility of The Businessman For Education

By CHARLES H. COSTELLO, *Vice President**

C. Cowles & Company, New Haven

MUCH has been said and written during the past few years about industry's responsibility to the community and particularly industry's stake in public school education. Benjamin Franklin once said that an investment in knowledge always pays the best dividend.

There can be no doubt that we are talking about something very fundamental to business when we talk about education. We all share in this investment. Clearly the situation suggests that our investment needs the attention, not only from corporate citizens but also from individual citizens. What public schools need more than anything else is the full and active participation on the part of the greatest possible number of people in each community—and especially participation from business people.

I was given this assignment because I have been active in my own community as a school board member faced, in a short space of time, with just about every problem that can confront a school board.

In January, 1953, Regional High School District Number 5 of the State of Connecticut was formed, following a referendum vote in the towns of Bethany, Orange and Woodbridge. Each of the three towns elected three members to the Regional Board of Education and gave the Board responsibility for grades seven through twelve. At this point the Board had no school building, no faculty, no land and no money. With hundreds of prospective pupils eager to be moved to new quarters from their overcrowded elementary schools or to be relieved of the long bus trip to New Haven where they attended high school as tuition students, the Board had to act fast.

The Board first met and organized in March, 1953, and adopted a policy of school construction that would provide a functional and flexible building to meet the needs of the region; and to do this at the lowest possible cost and with the utmost speed. A firm of architects and engineers, accustomed to industrial and commercial work, was engaged and the necessary preliminary work started. The Board was convinced that a school could be built at a saving of from twenty to twenty-five percent under what was then the average school cost in Connecticut.

The architect designed a building of 98,000 square feet to accommodate about a thousand pupils and recommended the use of tilt-up construction. The use of this type of construction in building projects was common in the West and Northwest but had not been used extensively in the East. This method was originally confined chiefly to industrial applications but there was no apparent reason why the proved economy of this type of construction could not be used in building a school.

After a fifty-four acre site had been purchased and preliminary grading and compacting were completed, a general building contract was let and construction started in March, 1954. The target date set for completion of the junior high school wing was set for September. A reinforced floor slab was first poured and treated with a parting compound. Wood forms were then built on the floor slab. After setting electrical conduits, switch boxes, outlets and steel reinforcing, the panels were poured. The panels were all six inches thick and of different sizes to allow for doors, windows and other design features. The largest panel was 26 feet wide by 29 feet high. The smallest was 2½ feet wide and about 13 feet high. Because of the space limitations on the floor slab, panels were often cast one on top of another.

After the concrete was set a large crane came in and set the panels up on end. The reinforcing rods were then welded to matching rods projecting from the floor slabs. When Hurricane Carol came the contractor had 17 panels, weighing 20 tons or more each, set in place but with no roof. The braces held secure.

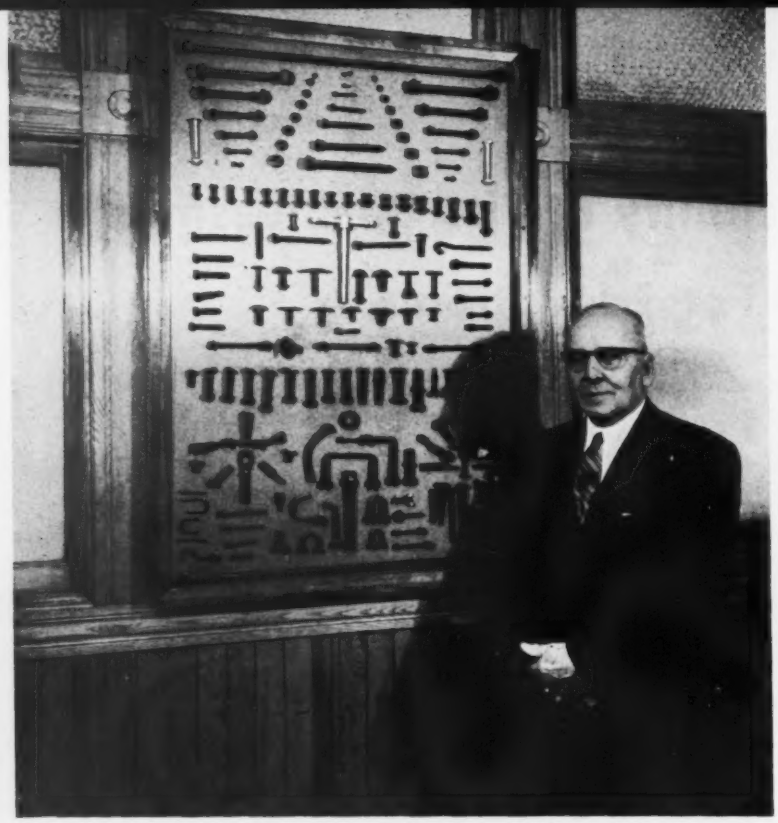
The sixteen room wing was completed in September, 1954, on schedule, and school opened with over four hundred pupils. Construction proceeded with school in session and as additional portions of the building were completed they were put into service. Last summer a six room addition was built, bringing the building to 101,000 square feet with a total building cost of $1,236,000, or about $12.25 a square foot.

A project of this magnitude could not have been done without the concerted efforts of many people—volunteer members of a building committee, for example.

If, out of apathy or sheer laziness, we let our American public school system fall apart, or come to depend upon Federal aid to build our schools, we will lose all that has been built up over the years. It is a responsibility of the businessmen of this state and nation—the men who will tomorrow employ most of todays students—to become aware of their great debt to the public school system and to make significant payments on that debt by doing school-connected work in their own communities.

---

* *Mr. Costello, author of this month's guest editorial, after graduating from Yale University in 1930, began work for C. Cowles & Co., of which he is now a vice president. He is a member of the Boards of Education in Woodbridge and of the Regional High School District No. 5. He is a past president of the Manufacturers Association of New Haven County; Treasurer, Conn. Branch of the National Metal Trades Association, Connecticut director of NAM and a director of several Connecticut corporations and a savings bank trustee.*



"NUTS AND BOLTS" no longer adequately describes Clark Bros.' products. Some idea of the diversity of industrial fasteners produced by the Milldale company is provided by this display board in the lobby. Oscar G. Knapp, president and treasurer is shown standing by display.

Romance of Clark Bros. Bolt Company

A PLOW turning the rich dark earth in Iowa . . . a conveyor bearing ore from deep in a Bolivian tin mine . . . a machete in the hands of a dark-skinned New Guinea native cleaving a path through matted green jungle—these are but a few of the products that are held together by Connecticut-made industrial fasteners.

Early History

Turning out products of this type, as well as its standard line of nuts, bolts, screws and rivets, is nothing new with Clark Bros. Bolt Co. in Milldale. The company, founded over 100 years ago, is the second oldest bolt manufacturer in the country.

The machine-made bolt and nut industry had its birth in the Southington area—the first building in the United States erected for this purpose having been in Marion, near Milldale. A section of this original building, complete even to the cloudy window glass and hand wrought door hinges, now stands in the lobby at Clark Bros.

DUDLEY H. SMITH, vice president, stands before first building erected in the United States for machine-making of bolts. Complete front of original structure stands in company's lobby.

Of the 18 bolt and nut companies set up in and around Southington since 1839, Clark is the only one remaining in New England engaged exclusively in the manufacture of industrial fasteners.

The company traces its origin back to 1851, when William Judson Clark established the business. He was joined by his two brothers, Henry H. and Charles H. Clark, in 1854, the date referred to as the formal founding.

By present day standards, the first bolts turned out back in 1854 were crude affairs at best. Even so, they were a tremendous improvement over the laboriously hand-fashioned, woefully inaccurate fasteners which had preceded them.

Since those early days, Clark Bros. has consistently been in the forefront in inventing new processes and developing new techniques for the rapid production of quality fasteners. The company was an exponent of automation long before that term became a general industry catch-phrase.

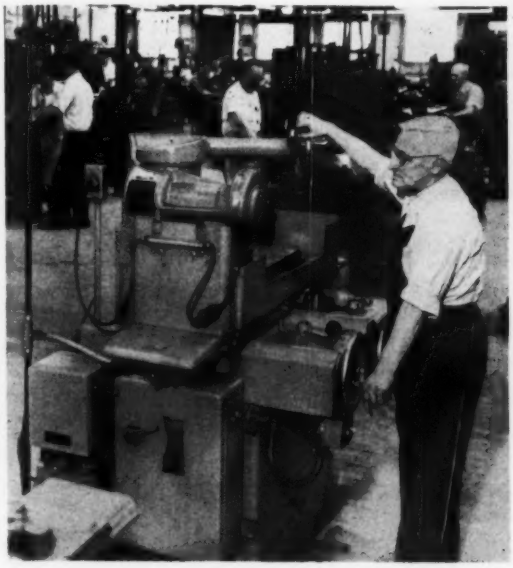
Some of the first products of the company were carriage bolts, whiffletree bolts, axle bolts and other fasteners needed in the pre-automotive days. As the country's industrialization began to develop and expand, Clark kept pace, diversifying production to include the wide variety of bolts, nuts, screws, rivets and other fasteners that industry required. Anticipating and supplying industry's fastener needs has been a hallmark of Clark progress throughout the company's 102 years in business.

Modern Practice

Today, Clark Bros.' diverse line of industrial fasteners is marketed through two main channels of distribution. Company representatives sell to industrial distributors and hardware wholesalers who re-sell to dealers or individual concerns whose end use of the products is primarily repair and replacement. Clark representatives also sell directly to manufacturing concerns which make extensive use of fasteners in assembling their own products.

In the course of keeping ahead of industry's needs, Clark Bros. has developed a number of notable "firsts". Many basic production methods now utilized as standard by competitive firms throughout the country had their origin at Clark Bros. Automatic nut tapping, for example, originated with Clark Bros. It wasn't until several years

IN THE TOOL ROOM, where the myriad of necessary dies, fixtures and tools are made, sure-handed craftsmanship teams with the most modern machinery to insure top quality end products.



COLD HEADING of bolts and special fasteners from coils of specially processed wire is accomplished on machines like these. Completed pieces drop into pan shown near operator's left foot above.

AUTOMATIC TRIMMERS for shaping hexagon and other style heads operate at high speed. Fed down the slide from hopper in background, bolts are trimmed and slide down chute into work pans at left.

LINES of hopper-fed machines such as these automatically tap various size nuts.

HEAT TREATING is handled in tremendous gas-fired furnaces. Products to be treated are spread on the shaker hearth, then moved through the controlled temperature furnaces by a series of hefty jounces that simultaneously shuffle and convey the pieces through to the quenching baths beyond.

later, in fact, that other fastener manufacturers were able to satisfactorily imitate the Clark-developed process.

At times Clark's progress in developing new processes has been so rapid that they've even had to make the machinery with which to carry out the processes. This was true of the automatic nut tapping operation, for instance.

The Connecticut concern also pioneered the cold heading process by which bolts are formed, headed and cut from round coil wire. Revolutionary at the time, this production method is now standard procedure throughout the industry.

As a result of its continuous alertness and willingness to experiment and innovate, Clark Bros. has developed an enviable reputation for its ability to cope with the "tough to do" fastener production problems. Clark is often called upon to produce "special" fasteners which other concerns with many times their productive facilities can't cope with. It's a case of "the difficult we do immediately, the impossible just takes a little longer."

Employee Benefits

Keenly aware of their company's splendid heritage in this regard, employees at Clark take a well-justified pride in exhibiting the Yankee ingenuity and traditional New England craftsmanship that the tough assignments demand.

Interest and loyalty of the company's employees, in fact, has been a major factor in Clark Bros.' growth and its long-standing reputation for excellence of product. Faithfulness of the concern's employees is startlingly evident in tenure-of-employment figures—approximately 50% of the working force having been with the company for 10 years or longer.

Though old in terms of years-in-existence, the company pioneered in introducing employee benefits. Clark Bros. was among the first companies in the country and one of the very first in Connecticut to provide a program of company-financed health and accident insurance, having had such a program in force since 1920.

In addition to the customary company benefits such as paid holidays, paid vacations, contribution toward Blue Cross payments, etc., Clark Bros. has a company sponsored life insurance plan covering all employees and a pension plan to provide retirement income for their employees.

Company Leadership

President and Treasurer of Clark Bros. is Oscar G. Knapp, a veteran in the bolt, nut and rivet industry who has been with the concern for over 50 years. A keen-minded man possessed of a quick humor that flashes through his brisk, business-like manner, Mr. Knapp has continued the alert management which has characterized the company's growth.

The son of a building contractor in Southington, he began work with Clark

(Continued on page 42)

HERE items are weight-counted, packed in individual cartons which can be conveniently handled by Clark customers. Different colored labels are used for various types of fasteners to facilitate on-the-shelf indentification.

FORMING of hexagon nuts directly from coils of round wire on high speed, precision machines such as these is another specialty.

HYDROXOLATION — A Boon to Industry's Trash Disposal Problems

Editor's Note: This article deals with the latest product developments of a subsidiary of the Silent Glow Oil Burner Corporation, an early pioneer in the oil burner home heating field. These latest products are numbered among the more important of the many products created as a result of the company's research efforts conducted for more than 30 years.

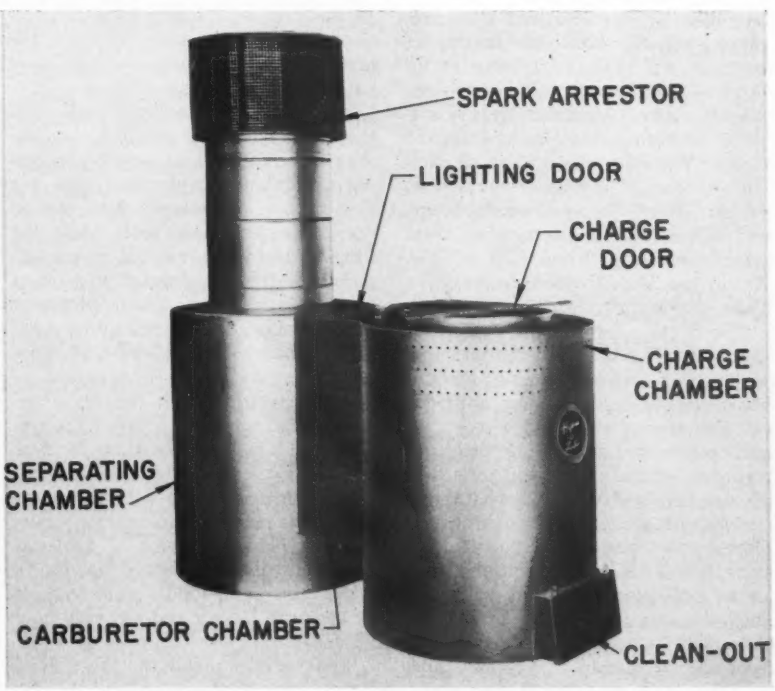
CONNECTICUT industry today, more than ever before, is faced with a growing trash disposal problem. The increase in the prepackaging of all types of consumer and industrial products is a major contributing factor. The general high level of production, which Connecticut industry has enjoyed during the past few years, has also helped to make the trash disposal situation even more critical. The disposal problem is being made more acute because the increase in trash is overtaxing the capacity of existing plant incinerators. Evidences of this can be seen all too often in industrial areas in the makeshift devices such as open fire pits, barrels, and wire enclosures that are used to burn this excess trash. These methods of trash disposal not only violate many of the fire and sanitary codes, but also create fire hazards, objectionable odors, unsightly refuse pits and similar conditions. Bad as this may be for the plants from a public relations standpoint, these haphazard methods breed dangerous disease conditions to say nothing of the increase in "smog" for which the indiscriminate and inefficient burning of trash is partly responsible. That industry is footing the bill is evidenced in the valuable yard and storage space which this trash so often requires. Extra trucks and labor also add their considerable share to this needless expense.

A sound solution to this costly nuisance which has been recommended by combustion engineers, is the Hydroxolation principle of combustion combined with Triple Chamber Construction. In simple language this means that when burning material is turned into a gas and small quantities of heated air are introduced to develop complete combustion . . . hydroxolation has taken place. The efficiency of the Triple Chamber Combustion lies in the fact that, as the name implies, three separate chambers (Charge Chamber, Carburetor Chamber and Separating Chamber) are used to accomplish complete combustion. Additional air is added successively, above and in front of the gas so that all the hydrocarbons are burned. Thus, positive trash disposal without the nuisance of air pollution from smoke, fly ash or after smoldering is accomplished.

This new burning principle has been introduced into two new Connecticut-made products: the HYDROX-O-LATOR and the CONFIDENTIAL PAPER DESTROYER, both manufactured by the Outdoor Oven Fireplace Company, a division of the Silent Glow Oil Burner Corporation of 873 Windsor Street, Hart-

(Continued on page 60)

CONFIDENTIAL PAPER DESTROYER for old records, documents and blue prints.



INDUSTRIAL HYDROX-O-LATER is available from five to thirty bushel capacity.

State's First Group Medical Service For Industry Celebrates Tenth Anniversary

By ELLSWORTH S. GRANT, *Vice President*
Allen Manufacturing Company, Hartford

SHORTLY after the end of World War II a handful of smaller manufacturers in Hartford solved what was both a human and a company need in the simple, direct manner characteristic of American business initiative. They recognized the value of adequate health care for their employees. Individually, they could not economically provide it. But as a group they could and did employ an industrial physician to administer a comprehensive medical service. Thus, in April, 1946, was started the Hartford Small Plant Group Medical Service.

At the time it was a unique example of voluntary cooperation in the field of health, achieved through the assistance of local medical men, the Connecticut Medical Society, State Bureau of Industrial Hygiene, and the Manufacturers Association of Connecticut. Six Greater Hartford firms employing about 3000 comprised the group at the beginning. Three of the original members still belong to the Service: Allen Manufacturing, Capewell Manufacturing and Cushman Chuck. The other participants at present are Hart Manufacturing, Hartford Electric Steel, Jacobs Manufacturing, and Wiremold. Employment in these companies ranges from 200 to 700. At present Dr. W. W. Dickinson of Yalesville is the consulting physician.

The Service itself is the essence of simplicity. The idea of a central clinic with a staff and necessary equipment was discarded beforehand as impractical. One reason was the cost to set up and operate. Furthermore, it could not render quick and convenient service to all members and would inevitably interfere with production by taking employees away from work too long. Instead, it was decided to bring the service to each plant according to individual size and need. For this purpose each plant is required to maintain a dispensary suitably equipped and staffed by at least one full-time registered nurse. The doctor is responsible

ELLSWORTH S. GRANT

to the personnel officer in each company. Professionally, he supervises the activities of the nurses through daily contacts and standing orders.

Following a pre-arranged schedule, the doctor visits the member companies two or three times weekly, requiring an hour or so of travel time per day. In case of emergency he can be notified immediately and reach the scene within a few minutes. In the factories his time is devoted to various types of examinations, pre-employment and otherwise, first aid and minor surgery, consultations both with and about employees, and plant inspections. In close cooperation with the personnel department he is the medical policy-maker, although his decisions in most cases take the form of recommendations to management, with the latter responsible for their adoption. Coordination of the Service is achieved through regular meetings of the group's nurses and semi-annual get-togethers between the Doctor and the personnel officers.

Without minimizing the function of the industrial physician, it can be truthfully said that the key to success of any in-plant health program is the well-trained nurse. A specialist in one sense, the nurse in industry must be extremely versatile. Besides giving first aid she keeps records, makes out claims, counsels, and instructs. Hers is a dual obligation—both to her profession and to her company. While adhering to professional ethics and the doctor's standing orders, she must bear in mind company policies. She sees to it that the medical service functions with minimum expense and production delay, yet offers sufficient and sympathetic care.

It has been the Service's experience during the past decade, and to some extent one of its achievements, that emergencies are rare and occupational injuries comparatively infrequent. As the Service matured, it became primarily preventive. It now concentrates on preventing lost time and keeping employees healthier and safer at work. It joins forces with the safety director to eliminate hazards, improves plant sanitation and nutrition and carries on various health-building activities — some in association with community agencies. For example, one company in a typical year gave voluntary check-ups to one-half of its employees, provided cold vaccine injections at cost, conducted a successful campaign to reduce eye cases, and scheduled chest X-rays for most employees at the Hartford Health Department.

More than half of employee visits to the dispensary are for non-occupational reasons, such as colds, headaches and other minor illnesses. In addition, some of the member firms encourage their employees to see the doctor in strict confidence on personal health matters. In one plant the doctor held 940 private consultations last year or an average of 1.4 per employee. Such consultations help to relieve tensions and keep the worker on an even keel. They often result in referral to the employee's own physician or to a specialist for further investigation and correc-

TYPICAL first aid and examining room in Hartford Medical Service. Each of the seven participating companies maintains a fully-equipped dispensary for examining applicants or employees and giving first-aid treatment. Cost of setting up such a unit ranges from $1,500 to $2,500.

tion. Occasionally, they may involve job or family problems on which the personnel department can help.

A dramatic instance of medical-management teamwork occurred recently when the Service doctor talked with a young supervisor who had been bothered for a long time by stomach trouble and had seen several doctors without apparent relief. He was sent to a specialist who diagnosed the ailment as being very serious and recommended an operation. Aware of these facts, the Service doctor advised the management, without revealing the specific condition, that the long-term prognosis for the supervisor was extremely poor. It so happened that the company had no understudy for this man, and replacement would involve considerable training. Without letting him know the real reason, steps were immediately taken to give him an assistant. It was a wise move, because within a year the stricken supervisor was dead.

In keeping with the wider application of insurance and pension plans and their mounting cost, every company is today faced with many complex medical questions involving important decisions on job placement or transfer, disability and retirement. The H.S.P.M.S. is helping to solve these problems. In the area of placement, for example, more attention is being devoted to matching the individual applicant's physical capacities with the physical demands of the particular job. At this starting point of the employment relationship correct action may save trouble and expense later on. Not only can proper placement prevent unnecessary lost time, but the individual's efficiency will be increased by his suitability, physically at least, to perform the work assigned.

It has also been found that in cases of disability, on or off the job, the Service facilitates the employee's return to work at the earliest possible time, thus helping production and saving needless compensation or group insurance expense. According to one survey, an injured worker who is under the care only of a general practitioner (most of whom have little acquaintance with industrial conditions) will usually lose three to five times as many days as one over whom an industrial physician has some control. Both the doctor and nurse play a key role in controlling absenteeism in cooperation with the department supervisor. The nurse checks every employee after an absence, while the doctor may be called in to determine the reason for continued lost time or to correct the cause through consultation or outside referral. Again, when considering whether or not to postpone the retirement of an old employee, the doctor's medical evaluation of his fitness for another year of work is essential to reaching a fair and objective decision.

Thus, at an annual cost per employee of roughly $20.00 the Hartford Small Plant Medical Service is paying both direct and indirect dividends many times over to the member plants. It can take a large share of the credit for fewer accidents, absences and employee separations. It undoubtedly contributes to higher output per worker. As one of the most respected and appreciated services that a company can offer, it has earned extra good will

(Continued on page 44)

Comment By The Wiremold Company

"Our Company, which employs approximately 360 people, is not large enough to require the full time services of a physician. However, realizing the importance of Industrial Medicine in Accident Prevention, we have, through our membership in the Small Plant Medical Service, been provided with improved medical care by a competent industrial physician, who is intimately familiar with the working conditions in all our departments. Through his understanding and cooperation with the family physician Modern Industrial Medicine is being brought into the intimate working area of each employee.

"Our nurse, being constantly in the working area, appreciates and understands the problems of the employee and therefore is better able to give a much clearer and detailed report to the physician. Under his guidance she becomes a logical employee counselor on personal and intimate problems."

THE RELIGIOUS PROGRAM at G.E., which has made it possible and convenient for employees to worship in the plant, includes the celebration of the Mass each Wednesday noon for employees of the Catholic faith.

General Electric Inaugurates Lenten Services at Bridgeport Plant

A SEVEN-WEEK series of noon-hour in-plant Lenten religious services for Roman Catholic and Protestant employees has been attracting capacity attendance at the Bridgeport plant of General Electric. This is the first year such services have been held.

Local clergymen of both faiths are officiating at the services, being held Wednesdays and Thursdays in the plant auditorium, and special arrangements for seating and installation of Catholic and Protestant religious fixtures have been made.

The first two services, held on Ash Wednesday and the day after, attracted such crowds that many stood outside the auditorium to hear the service.

Management called the response gratifying.

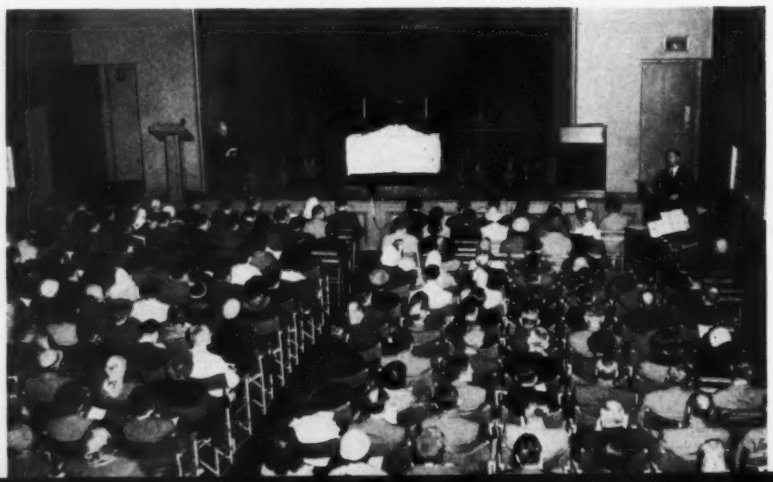
Said C. Howard Black, General Manager of the Construction Materials Division, who was formerly located at West Lynn, Mass., where Lenten services were inaugurated last year:

"I am delighted to see the acceptance of the idea by our people and the great number who turned out for the initial services. Certainly the level of acceptance compares very favorably with Lynn where the services were also very well received."

Mr. Black's sentiments were seconded by Willard H. Sahloff, Vice President and General Manager of the Housewares and Radio Receiver Division, who said, "The quiet enthusiasm with which GE people quickly accepted the opportunity to participate in these in-plant religious services during the Lenten season is most certainly a reflection of the widespread movement toward religious thought."

Planning arrangements for the Lenten services were made and announced by a combined committee of Bridgeport clergy and GE management which included the Rt. Rev. Msgr. James J. McLaughlin, Vice Chancellor of the Roman Catholic Diocese of Bridgeport; the Rev. Frank L. Hutchison, Executive Director of the Council for Inter-Church Cooperation; the Rev. Caryl V. Benson, Vice President of the Pastors' Association; the Rt. Rev. Msgr. Thomas P. Mooney, St. Ambrose Roman Catholic Church; Maurice W. Reid, Manager of GE Bridgeport Relations and Utilities; William F. Burleigh, Manager of Employee and Plant Community Relations; Kenneth A. Maloney, Manager of Community Relations and Elliott H. Graham, Accessory Equipment Manager of Employee Relations, and Harry H. Brown, General Electric News Editor.

DEVOTIONAL SERVICES for G.E. employees of the Protestant faiths were held each Thursday noon during the Lenten Season.



Association Endorses Plan to Eliminate Punitive Taxes

By CHARLES H. SCHREYER, *Attorney*
Manufacturers Association of Conn., Inc.

At its March meeting, the Board of Directors of the Association voted to adopt the recommendation of the Association's Taxation Committee to support, within certain limitations, a plan developed by the National Association of Manufacturers which is designed to ease gradually over a five-year period the worst excesses of the Federal system of high and discriminatory rates of income tax. The action of the Board and the reasons on which it is based are described in the following article.

TWENTY-FIVE years ago, the top level of the individual income tax rate was 25%. At the $20,000 income level, it was 10%. The corporation rate was 12%.

Today, the corporation rate has climbed to 52%. The steeply graduated nature of the present individual income tax is shown by the following sampling from the tax table:

Taxable Income Over	Not Over	Pay	Tax +Rate	On Excess Over
	$ 2,000		20%	
$ 2,000	4,000	$ 400	22%	$ 2,000
8,000	10,000	1,960	34%	8,000
16,000	18,000	5,200	50%	16,000
26,000	32,000	10,740	62%	26,000
50,000	60,000	26,820	75%	50,000
100,000	150,000	67,320	89%	100,000
200,000		156,820	91%	200,000

These cold figures are well calculated to generate chills in the minds of people who appreciate the necessity of a continuous supply of risk capital to our free enterprise system. A tax system like this which virtually confiscates potential savings is not only grossly unfair to the individual who is striving to start or expand his business but it also stifles the growth of the economy as a whole.

The Association's Tax Committee, which has devoted much time and thought to the problem, had long ago concluded that these high and confiscatory rates are the chief deterrent to the orderly and necessary expansion of our economy. Up until now, however, it has been difficult to approach the problem in the face of a long succession of annual deficits in the federal budget.

This year two things have occurred which make it possible for those who oppose discriminatory taxes to do something about it. First, the Eisenhower administration has brought an end to government deficits, and the prospects that substantial surpluses will be built up in the years immediately ahead are good. Second, the taxation committee of the National Association of Manufacturers has developed a dynamic plan by which the worst excesses of the present progressive tax system can be eliminated without creating a budget deficit.

The fiscal integrity of the NAM plan is built upon two premises. First, contrary to common belief, the entire progressive superstructure of the present tax system—which is that part of the rate in all brackets in excess of the basic rate, now 20%—produces only 16% of the total revenue derived from the individual tax, or $4.7 billion (out of a total of $29.4 billion). Second, there is every reason to believe that the historic rate of economic growth in this country of about 3% a year will be equalled, if not surpassed, during the next five year period—which growth is estimated to result in an estimated *gain* in annual tax revenue of about $12.3 billion during the period.

Against this background, the NAM proposes the following five-year tax reduction plan:

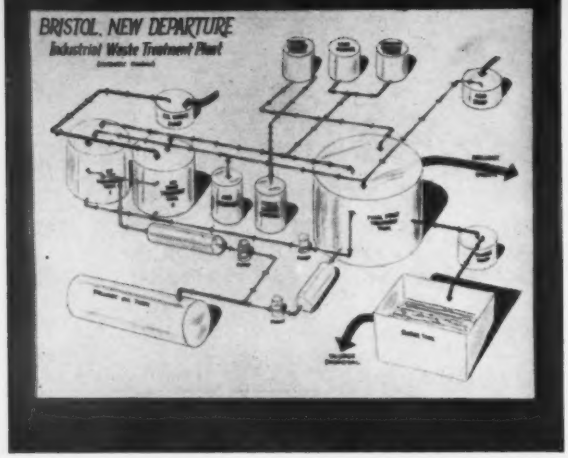
1. The progressive element in the individual income tax — that part of the rate in each taxable income bracket in excess of the basic rate, now 20%—should be reduced by 16% in each of the next five years so that the top individual tax rate at the end of the period will be 35% —compared to the present maximum rate of 91%.

2. After the initial reduction of five percentage points in the corporation normal tax now scheduled by law, the corporation tax should be further reduced in each of the succeeding four years by 3%, to be distributed equally between the normal tax and the surtax, so that at the end of the period the normal tax rate will be 19% and the surtax rate will be 16%—or a total rate of 35%.

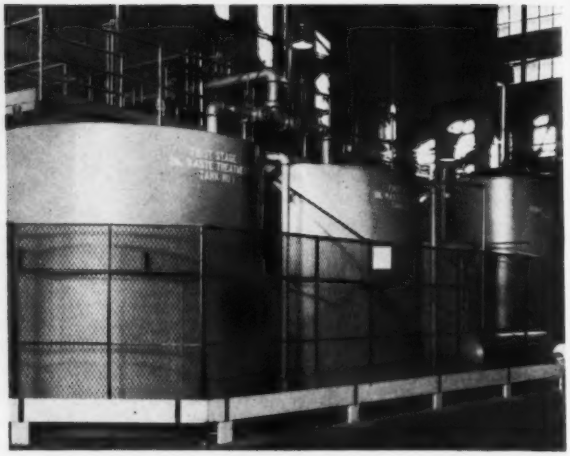
On the assumption that the economic growth during the five-year period will follow the historical pattern of 3% a year, it is estimated that this plan can be put into effect and still leave a net *gain* in federal revenue, according to the following NAM figures:

	Millions
Estimated *gain* in annual revenue from economic growth	**$12,284**
Estimated *loss* in annual revenue from rate reductions	
Individual income tax	**4,739**
Corporation income tax	**5,112**
Total	**$ 9,851**
Net estimated gain in annual revenue at end of five years	**$ 2,433**

(Continued on page 46)



SCHEMATIC DIAGRAM depicts how the industrial waste treatment operates. The waste oil is received into waste oil sump (upper left). It is then pumped into first stage of treatment tanks, two each with 10,000 capacity, for removal of free oil and breaking of soluble oil emulsion by the addition of acid and calcium chloride, and agitated for 20 minutes. Skimmed off oil flows into oil waste tank, is reclaimed in salvage oil tank (lower left). The skimmed solution is pumped at the rate of about 75 gallons per minute to inner section of final stage treatment tank where ferric chloride and lime are added. The sludge is pumped to sludge tank, (lower right) from where oil moves to



oil waste storage tank and clear effluent passes into North Creek, which empties into the Pequabuck River. (Above) Part of the newly installed industrial waste treatment system at New Departure's Bristol plant. Although no cost figures have been disclosed it is estimated the system represents an expenditure in excess of $200,000.

New Departure Opens Second Waste Treatment Plant

New Departure Division of General Motors Corporation is now operating modern industrial waste treatment systems at its plants in both Bristol and Meriden. The one at Bristol was completed in early December of last year whereas Meriden's was put into operation toward the end of 1954.

As was the arrangement in connection with the opening of the Meriden plant's installation, New Departure invited city officials, representatives of various Bristol industries, State Water Commission officials along with newspaper and radio personnel to spend part of a day inspecting the treatment plant in operation. Purpose of course was to give the visitors first hand knowledge of what takes place when water is purified after use in manufacturing processing before it is emptied into public streams.

Among those on hand for the Bristol visitation were Bristol's mayor, James P. Casey and John J. Curry, chief engineer for the Connecticut Water Commission. Divisional and Bristol plant executives of New Departure served as guides on the tour through the area of the ball bearing manufacturing establishment which houses the modern waste treatment system. More than 40 heard an explanation of the setup.

In providing the waste treatment installations at Bristol and Meriden, the General Motors Division has complied with an existing policy of GM that calls for treating waste materials from manufacturing operations. The projects are also in line with the efforts of Connecticut's Water Commission's anti-pollution campaign. A similar system was placed at New Departure's Western plant in Sandusky, Ohio when that plant was constructed in 1945.

WATER FIT FOR FISH! That's what Harry P. Henderson, factory manager at Bristol plant proves as he holds bowl with gold fish swimming in purified water from waste treatment plant. Looking on are Frank J. Thiery, superintendent of Bristol Water Department (left) and Timothy J. Donovan, head of city's Public Works Department.

SETH H. STONER, New Departure Division's general works manager, explains particular stage of waste treatment to (left to right) Ernest L. Goff, executive vice president, Associated Spring Corporation, Bristol; Clarkson S. Barnes, managing editor, The Bristol Press, and Harold E. Jacobson of Argonaut Realty Div., General Motors.

Replenishing Our Talent Pool Deserves A High Priority

By DOUGLAS M. FELLOWS, *Administrative Director*
Ward School of Electronics, Hartford

In view of the well recognized shortage of engineers, it is apparent that drastic action must be taken, not only to increase the supply of full-fledged engineers but also to increase the number of technicians. One practical way to minimize the shortage of engineers is to furnish them with an adequate number of well trained technicians to assist them, thus releasing large blocks of their time for planning and administrative work.

Mr. Fellows tells in this article what the Ward School of Electronics is doing to increase the pool of trained technicians.

THE average citizen, asked to name industry's most valuable asset, would probably mention the plant, equipment or inventory, according to which had the highest book value. A few, recalling a course in economics, might mention goodwill, and with this for a start, might readily enter a prolonged discussion about the relative merits of different types of employees and their relations to the corporation as a whole.

Possibly this last undefined value of the teamwork between the workers and management touches a very real asset, available in varying degrees there at all times and without cost: This is the talent pool of each community or region.

The talent pool, however, is a variable which must be drawn from with discretion. Like the pond from which farm cattle refresh themselves, no pool can survive indefinitely unless it is replenished, and in time of great need, there is always the danger of destroying the well-springs of supply.

Today's demand for engineers and technicians has already put a strain on the talent resources of Connecticut. In addition, out-of-state industries have invaded the region and tapped the labor market for some of the best workers through promises of special privileges and opportunities. In such a crisis, it is no wonder there has been a temptation to take the source of this talent—The Teachers.

The problem remains unanswered, but analysis of the factors involved suggests positive approaches to ease the situation. First, the most appalling

DOUGLAS M. FELLOWS

is the waste of human energy. Faced with a shortage of engineers, we discover that many engineers are not doing engineering work. Some are selling, others have administrative positions and others (because of the lack of technicians) are doing work they should be able to delegate to others. The causes are two-fold, the first being apparent. Industry, in providing advancement, frequently advances skilled personnel into new fields for which they were not originally trained on the premise that a good brain, trained to orderly performance, can and will produce anywhere and anytime.

The second cause is one that gives concern because there is no single method of overcoming the difficulty. Many persons are educated for careers not suited to their personalities or interest. Frequently, the cause is poor guidance, social background or financial limitations. The solution is not simple, but indicated is a contribution by industry in which educators are given the opportunity to understand more about job requirements. Such participation in education might evolve a principle in which administration or salesmanship (for instance) would be the major, with engineering principles taught only to the extent of providing a talking knowledge of the field. In other words, it might well be possible to reverse the present trend and teach a good salesman or administrator enough engineering to do the job for which his qualifications have already been proved.

The need is indicated by broad statements published from time to time in which industrialists state that they require from three to eight technicians to do the work designed by one engineer, and it follows that, if there is currently an engineering shortage, the lack of technicians must be much greater. This, definitely, is not confined to these two classifications, but is true of any skill, regardless of nature. It does, however, point to the fact that more and better training is required and that industry itself must participate in the direction to be taken in the future.

How do we start? There are many approaches to the problem of education, none of which is entirely satisfactory. Experience, during the past decade indicates, however, that in the long run the employee with a broad educational background is more satisfactory than the one who specialized at an early age. The dangers of the latter were emphasized during the Nazi rise to power in which the support came from people with high grades of skills knowing little about the application of

(Continued on page 34)

Engineering Education For The Future

by
CHARLES H. COOGAN, JR.
Professor and Head
Department of Mechanical Engineering
University of Connecticut

Editor's Note: Professor Coogan discusses in this article some of the problems involved in training an adequate supply of engineers to maintain our country's position on the scientific frontier and suggests some methods of solving them.

THE IMPORTANCE of engineering to the industries of our state is brought vividly to the forefront by a careful perusal of almost any current newspaper today. The opportunities for engineers in our local industries range from work in the automatic control of machine tools to submarines, rockets, helicopters and nuclear power plants. The range is so broad as to be almost innumerable. These opportunities extend throughout the areas of research, development, design and production. Not only are high salaried technical and scientific positions open to engineers but also important managerial positions. While it may appear as though preparation for such positions as "Analog Computer Specialist" and "Engineer experienced in Thermodynamics" have very little relation or common ground, actually, the basic educational training should be somewhat similar with much common ground.

Historically, within the industries of our state we have seen the trend set by the industrial revolution develop, and the same trend continues today with even greater force. The interchangeable manufacture of small and large machine parts, as well as other similar items, was started many years ago. This particular development was initiated by Eli Whitney who was graduated from Yale in 1792 prior to the establishment of an engineering curriculum at any educational institution in the United States and before the word engineer had its current significance. Since that time the increasing mechanization and electrification of our factories and whole way of life has continued. Today, due to these trends we have more power consumed by each

CHARLES H. COOGAN, JR.

worker in industry and also a greater investment in the working tools of each worker then ever before. This trend, leading to the almost complete automation of certain types of our factories, has also brought about a tremendous increase in the number of engineers required per worker throughout all of American industry.

This increased mechanization together with its increased scientific complexity requires that the engineer, who today is called upon to keep our production running, to plan new and cheaper methods of production and to develop entirely new products and machines to be marketed in the future, shall have a better and wider technical and scientific background than heretofore.

Since the discovery of fission in 1939, the engineer has been in the forefront in the development of the practical application and utilization of nuclear power. In this field, as in many others, the engineer has led the way in applying a scientific discovery to the early beneficial use by all mankind. In order to explain this phenomenon it is necessary to examine the educational background of our engineers.

The typical engineering curriculum for the bachelors degree consists today of either 4 or 5 years of college level education. (Mostly 4 although there is a strong trend toward 5). The typical engineering curriculum strongly emphasizes the basic sciences of mathematics, physics and chemistry and the engineering sciences of mechanics of solids, fluid mechanics, thermodynamics, transfer and rate mechanisms, electrical theory and the nature and properties of matter. In addition there are courses in engineering design and analysis. An equally important aspect of the curriculum is the courses in the humanistic and social sciences which comprise approximately 20% of the total requirement. These courses attempt to orient the engineer with respect to his developments and the development of society as a whole, and provide a broad base for human relations.

The engineer deals primarily with the physical world. In recent years the rate of scientific discovery has increased, due partially to the recent war, but equally important due also to the increased support given by industry and the government to basic research. With this increased rate of scientific discovery it is more essential than ever before that the engineer be informed and understand the latest developments and discoveries as they occur. In view of the fact that the engineer must redesign material things which will continue to function under specified conditions, it is absolutely essential that the basic laws whenever possible be set down in mathematical terms. Once this is accomplished it is then possible to optimalize the particular problem at hand. This requires that the engineer have an excellent command of advanced mathematics through and beyond the phase commonly called "differential equations". The engineer of tomorrow will need even more mathematical training.

The engineer should also be familiar with the latest developments in the

field of physics, especially nuclear and solid state physics. The time will likely come in the future when one calculates the constants of a material such as its elastic limit, ultimate or breaking strength, etc. from the atomic and nuclear information on the material rather than by testing sample pieces in a testing machine.

The yearly direct cost of education (i.e. academic training—students' class and laboratory work) for an engineering student, at an institution which is considered by many as the "Standard Engineering School of the Country" at the present time runs about $2500 per year. This is the cost of teaching and does not include such things as books, board and room, etc. Roughly half of this cost is covered by the tuition fee and the remaining half from income from endowment and such other sources as gifts, etc. Current indications are that this cost, which has continually risen during the last few years, will continue upward.

With this high cost, which is partially borne by the student, and with the attractive and lucrative positions available for our young engineers in industry, the great majority of the bachelors level graduates today accept jobs in industry immediately upon graduation. With the increasing complexity of our research and development activities however, many of our young engineers who take this path find, that they need formal advanced education considerably beyond the bachelors level. Currently a movement is taking place throughout the country to provide graduate educational opportunities for these men in close proximity to their work in industry. Progressive companies have even provided time for such activity.

A rather small number (too small for the best interests of our country) of the bachelors graduates study in residence at a university, on a full time basis, and obtain the Master's degree (usually in one additional year) and a much smaller number earn the Doctor's degree by work in residence. This trend, if continued, could result in fewer engineers being trained to the highest level at a time when they are most likely to be in the greatest demand and most sorely needed.

Another trend likely to develop in the future is short refresher courses in specialized fields in order to help our experienced and practicing engineers stay abreast of the times especially in view of the rapid pace being set by the men working on the scientific frontier. It is quite possible that this may bring a time when the engineer returns for short formal periods of schooling once a year.

Still another trend which appears to be developing is closer cooperation between industry and the university professor, through consulting relationships and arrangements. This trend, as in the past, is due to the fact that the specialist, in many cases a man working on the frontier, is in a better position to give a rapid authoritative solution to a problem in his field than the neophyte.

The present shortage of highly trained engineers may be partially alleviated by better utilization of professors working closely with industry to the benefit of industry without reducing our critical teaching man power. Many times such consulting relationships between the professor and industry lead to a cooperative research project whereby a graduate student undertakes the study of a problem of fundamental nature and importance to the industry. This ordinarily leads to the strong support of full time graduate students through fellowships and increases the supply of advanced highly trained persons in the field.

Small industry is sometimes financially overwhelmed when it wishes to support basic research in this manner. Support, however, can easily be arranged by companies which have a more or less common product, forming cooperative trade associations to sponsor basic research of interest and benefit to the whole group.

The future is before us. Let us examine the trends which are developing and which are affecting the university engineering college. To study this problem let us draw a "control" surface around the university engineering school and then examine the changes which are likely to affect our input (raw material-freshmen) and our product (BS graduates; "deluxe" product-graduates with higher degrees). In other words we examine what crosses the control surface and what happens inside it! The total number of students entering our universities will materially increase. It is estimated that the number of high school graduates will double in slightly over ten years. It is absolutely essential that students planning to enter the engineering profession have a good background in secondary school mathematics (4 years) with one year of physics and one of chemistry also highly desirable. In order to maintain our position on the scientific frontier it is absolutely essential that our secondary schools strengthen these areas. Furthermore, remember that the mastery of mathematics requires time. Encouragement should therefore be given, at an early age, to our young people who show an aptitude and interest for this area, to take this amount of training in these fields in the secondary school.

The engineering curriculum in a university is a rigorous one and it is expected that ordinarily students considering engineering as a future career will stand in the upper quarter of the overall integrated group of high school graduates.* Students who show demonstrated aptitude and are allowed to enter a university engineering program with a lower standing should be prepared to accept the higher mortality rate as inevitable. It is doubtful that students below the fiftieth percentile in secondary school standing should consider the engineering field at all. In any event, aptitude in mathematics is of prime importance and will become more important in the future, since this will very likely bring the time when the engineer sets the problem up and the computation is done rapidly on an electronic computer.

With the increase in available Freshmen it is expected that our universities will be called upon to handle considerably larger numbers in the near future. Buildings can be built in a reasonably short time. It is not possible to educate and train new professors in as short a time. We are very likely to find that our largest and most difficult problem to solve is an adequate supply of competent experienced engineering professors, even with an increased utilization of our present staffs. This problem is a major one and it is absolutely essential that it be solved. Part of the present problem is limited financial reward. This problem must be overcome. It is going to be necessary to pay our engineering professors salaries more nearly comparable with industry in order to alleviate this problem in the not too distant future.

Insofar as the curricula are concerned the trend will be toward a more mathematical and scientific engineering training combined with gradual lengthening of the undergraduate program to 5 years and beyond. Eventually a larger percentage of students than at present will continue their education beyond the bachelors level. This is also

(Continued on page 42)

** See recent report on Evaluation of Engineering Education of the American Society for Engineering Education.*

AUTOMATION — Fact and Fancy

"AUTOMATION" is a word you will not find in any standard dictionary, yet in the relatively few years since World War II it has captured the public's imagination somewhat as has atomic energy. And there has been just as much misinformation going around, about tomorrow's push-button factories and mass unemployment (or, others argue, mass leisure). What, in plain language, *is* automation, and what does it offer industry, large and small, *today?*

Definitions of "automation" are numerous. The simplest is "automatic production," from which the word itself is said to have been wrought. Perhaps more descriptive is "continuous automatic production." But these convenient terms are reduced to the status of catch-words when we come upon a statement like the following" operational" definition:

> Automation is a means of analyzing, organizing, and controlling our production processes to achieve optimum use of all our productive resources—mechanical and material as well as human.

But no such concise definition, however well phrased, can do justice to the far-ranging realities and implications of automation. Its true role has been all but obscured by sensational statements and articles calculated to appeal to the popular imagination and, as one observer noted, by a "junk heap of meaningless advertising jargon."

Automation suggests machinery which automatically will do such things as manufacture, inspect, assemble, test, package, and even market a given product. There is nothing particularly revolutionary about doing these things automatically; automatic machinery has been around for years. What is relatively new, except in a few process industries such as petroleum, is the linking together of automatic machines and automatic materials handling equipment—and the further linking together of such combinations and controls to bring about continuous automatic production—automation.

Like those other post-war sensations, atomic energy and the completely automatic factory, automation is not something that can come fully into its own overnight, on a nationwide scale. Because the building of the completely automatic factory involves relatively substantial capital investment, automation finds application most readily in those processes involving high volume of production. Yet you do not have to be a Henry Ford to take advantage of automation. Among its many successful applications are pretzel bending and cookie baking.

Perhaps because complete automation is no simple panacea, its simple forms are seldom appreciated. Just because a fabulous block-long machine can be designed and built to consume, say, logs at one end and eject packaged toothpicks at the other, does not mean automation cannot be practiced without such new, special purpose machines. Standard automatic machines already in production line use can be linked with automatic transfer devices to achieve truly continuous production. A refinement of this application would be the acquisition of new automatic machines of standard types having built-in automatic transfer devices.

As the competition for a share of the consumer's dollar grows hot and heavy, alert manufacturers are asking themselves, "What can automation do for me?" Those who have already "automatized" some processes are taking another look. Among the factors they should consider are:

1. The *methods* currently in use.
2. The right *timing*.
3. Appropriate *planning* and *organization*.
4. The *product*.
5. Production *processes*.
6. Potential *cost savings*.

No single factor in automation can be said to stand head and shoulders above the others in importance, but certainly the pay-off lies in the potential cost savings. The element of reduced labor costs has given rise to centuries of controversy. What answer can be given to those highly vocal individuals who claim that automation leads only to mass unemployment?

Serious students of the problem have never denied that when machines displace men (far from a modern phenomenon, this has been going on at an accelerating rate for the past several hundred years) some temporary hardship can be expected. In general, the much-feared unemployment has failed to materialize. Recent estimates indicate that for every person whose job is taken over by a machine that can do it better, faster and cheaper from two to five *new* and *better* jobs are created.

Still the myth hangs on, that security and certainty lie in doing things the old way, the hard way. During the depression haunted thirties economic theorizing on this and other subjects was carried to such unwarranted extremes that the whole field of Economics, and many of those who taught it, suffered loss of prestige. At a small college in a small town, a shrewd old professor of Economics told a story about the time when the problem of snow removal was being debated in a large northern city. A member of the city council suggested that special machines would do the best, quickest and cheapest job. Howls of protest arose; instead, thousands of needed jobs could be created by simply buying and handing out shovels. The professor agreed. "But why stop there?" he asked. "Why not create millions of jobs, by buying and handing out spoons instead of shovels?"

New and better machines not only make possible more jobs than existed before; they create better jobs. Writing over a hundred years ago in his penetrating commentary, "Democracy in America," Alexis de Tocqueville deplored the drudgery of industrial labor whereby "in proportion as the workman improves the man is degraded." Were he to revisit America today he would find the human robots of his time relatively extinct, and in their place, extensively trained and highly skilled maintenance personnel—people released from routine tasks for more "human use of human beings."

Incalculable as automation's contribution can be, in terms of increased employment, job upgrading, and reduced costs of direct labor, there is a further contribution that promises to become more and more significant. As opportunities for reducing manual operations are realized, automation will lead to even more important savings in greater productive efficiency and yields, better production control, and improved management techniques.

The possibilities for automation, such as the gathering and processing of information, daily become more numerous. The Industrial Power Consultants at your electric utility company, men whose job it is to serve industry, are in a position to help forward looking Connecticut industries meet today's challenge, the challenge of automation.

The Connecticut Light and Power Company, The Connecticut Power Company, The Hartford Electric Light Company, The Housatonic Public Service Company and The United Illuminating Company.

NEWS FORUM

This department includes a digest of news and comment about Connecticut Industry of interest to management and others desiring to follow industrial news and trends.

TO TELL THE STORY of Connecticut industry and the positive benefits it extends for every citizen, A. Carl Messinger of New York City has been appointed to the post of public relations director for the Manufacturers Association of Connecticut.

A native of Pennsylvania, Mr. Messinger was the owner and operating head for some years of Publication Associates, a public relations firm with offices at 270 Park Avenue, New York City. He comes to his new assignment from the Blood Banks Association of New York State where he was executive director. The latter is an affiliate of the State Medical Society which Mr. Messinger also served for some years as public relations representative.

During World War II, Mr. Messinger received from the President of the Philippine government one of three awards given for a public relations program that promoted understanding and better relations between the American Armed Forces and the citizens of Manila. He was the only enlisted man to receive the citation.

Mr. Messinger is a graduate of Valley Forge Military Academy and studied at George Washington University and Susquehanna University. For seven years he was director of the Luzerne County Newspaper Association.

A. CARL MESSINGER

★ ★ ★

PAUL W. BECKER has recently joined the Rockbestos Products Corporation, New Haven, as vice president in charge of maunfacturing, according to an announcement by Albert S. Redway, president.

A native of Syracuse, New York, Mr. Becker is a graduate of Hamilton college. For the past seven years he served as plant manager for the Electric Auto-Lite company of Hazleton, Pennsylvania. Prior to that he spent 17 years with General Cable Corporation.

In announcing Mr. Becker's appointment, Mr. Redway stated that his broad experience will enable Rockbestos to rapidly carry out the modernization program now underway and at the same time enable the plant to develop new and improved products.

The Cover

THIS MONTH'S cover photo shows Oscar G. Knapp, president and treasurer of Clark Bros. Bolt Co., standing in the lobby of the Milldale plant. In the background is the complete front of the company's original home—the first building erected in this country for machine manufacture of bolts.

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Westfield Metal Gets "A Most Desirable Layout"

Referring to Barney's installation of the open-area combination of executive and general offices, Robert Johnson of the Westfield Metal Products Co. stated: "Thanks to Barney's, we have achieved a most desirable layout in our open office space that allows us to continue a valued management-employee relationship. We were most favorably impressed with Barney's . . . and recommend them for fine service and reasonable prices."

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SOUNDSCRIBER'S "200" is designed primarily for the traveling businessman. It can be carried by handle, similar to a portable radio, or, as SoundScriber says, "Don't carry . . . wear it."

UNVEILD RECENTLY at the Office Management Association Exhibition in Chicago was what is described as the world's smallest, lightest, most compact dictating and recording instrument of its type in the world—the SoundScriber "200". It is a product of The SoundScriber Corporation of New Haven.

The new instrument is compact enough to fit into a brief case, suitcase, automobile glove compartment or the top drawer of a desk. It weighs only six pounds. The microphone, power cord, and a supply of discs are all self-contained within the instrument. Its dimensions are 2⅞" high, 6¼" wide and 10" long.

★ ★ ★

WILLIAM BRAND & COMPANY, Willimantic, manufacturer of plastic insulated wire and plastic and coated insulating tubing, has announced a new product line of multi-conductor cable.

The new "Turbo-Brand" cable will be manufactured to customers' voltage and temperature requirements, outer covers, lay-ups, with or without shielding and with exact positioning within the cable of the individual coaxials, twisted pairs, triples, and many other standard or more complex components that go into rigidly engineered interconnecting cables.

★ ★ ★

THE MOST RECENT ISSUE of "Die Set Digest," containing information of value to die designers, die makers and plants using press-dies, is now available from The Producto Machine Company, Bridgeport.

The eight-page, two-color publication features a detailed article on "How to Lubricate for Longer Life," illustrated with eight line drawings. Recent bushing innovations are also highlighted.

★ ★ ★

STANLEY A. BEVIN, president and treasurer of Bevin Bros. Mfg. Co., East Hampton, died recently in Middlesex Memorial Hospital after a long illness.

A lifelong resident of East Hampton, Mr. Bevin was educated in the local schools and at Betts Academy in Stamford, and then entered business with his father, the late Chauncey G. Bevin about 50 years ago.

Mr. Bevin was an accomplished organist and served in this capacity in the East Hampton Congregational Church. He was also a director of the Connecticut Bank and Trust Co.

He leaves his wife, a son, two daughters and eight grandchildren.

★ ★ ★

THE NEW HAYDON 6100 series subminiature snap switches are said to be the smallest dry gas filled hermetically sealed SPDT units on the market today.

Rated 5 amps resistive, 3 amps inductive, 2 amp motor load, either 28V DC or 110V AC, these small packages solve many limited space, minimum weight design problems where moisture, dirt, heat, cold and other environmental conditions might cause contact failure. Electrical and mechanical life is 100,000 cycles.

The new series is available with either bracket or through hole mount-

ing plus potted lead wires good for 250 F. Also, new to the entire Haydon line is the change over from steel to nickel silver housings for better salt spray resistance.

★ ★ ★

TO SPEED UP DEFENSE the last of over a million dollars worth of Pratt & Whitney Company Keller Machines is being erected in the new Cleveland, Ohio, plant of the Aluminum Company of America.

These huge die cutting machines, tracing from plaster models, mill cavities in large forging dies which, in turn, are used in the 35,000 ton and 50,000 ton forging presses to make large aluminum air frame fittings for B52 heavy bombers, Douglas DC8's and Boeing 606 Jet Airliners.

★ ★ ★

THE FORMATION of a new regional electric utility industry association to be known as the Electric Council of New England was announced recently by Sherman R. Knapp, president of The Connecticut Light and Power Company and first president of the new Council. Mr. Knapp also announced the appointment of Captain Henry A. Ingram as executive director of the Council with headquarters in Boston. Captain Ingram said that the formation of the Council will permit the 48 participating New England electric companies to have a continuous and ready interchange of information on engineering, sales, accounting, area development and advertising matters at a time when electric companies are facing the common problem of meeting steadily increasing demands for electric power within their respective service areas.

It is anticipated that committees will be organized, representing the various departments of the member companies to participate in the work of the Council. Among the subjects which will be emphasized are safety practices and review of emergency and disaster operating plans.

★ ★ ★

FRED A. ROFF, JR. has been appointed general sales manager of Colt's Patent Fire Arms Mfg. Co., Inc., Hartford, it has been announced by President S. A. Stewart.

Mr. Roff will be responsible for all sales, sales promotion, marketing and advertising activities. He was formerly sales manager for Hook & Ackerman, New York, and Redmond Industries of Chicago, sales training director and

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Equally obvious was the difficulty of producing the Milk Supply Tank, largest single part of the Separator. Measuring 23¾" x 13½" x 5⅞" deep, the tank has an in-formed flange—notoriously hard to curl smoothly. Now you may think of a separate splash guard welded on, but this offers a cranny custom built for bacteria. If at all possible, the flange had to be integral with the tank. Could Presteel do it? When flange machine makers said it couldn't be done, we stuck to our specialty, press tooling. We added local annealing leaving the top soft and the sides too stiff to buckle.

Result? Results! We are drawing the flange curving inward as pretty as an ocean ripple. Costs were far below estimates for two-piece construction. Give Presteel a crack at your toughest stamping problem. The harder it is, the better we'll like it! Simply send the coupon in today.

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★ ★ ★

APPOINTMENT of John A. Rinek as general manager of the Heli-Coil Corporation, Danbury, has been announced.

Mr. Rinek, a metallurgical engineer, served as a Navy pilot following graduation from the University of Michigan in 1939. He was later with Pratt and Whitney Aircraft as a test pilot and engineer. From 1945 to 1950 he was sales manager at Fenn Manufacturing Company. He then went to Hanson-Whitney Company as assistant sales manager and for the past five years has been eastern representative for the Avery Drilling Machine Company of Cincinnati.

★ ★ ★

DAVID W. MYERS, controller of The Producto Machine Company, Bridgeport, has been appointed vice president, it has been announced by Newman M. Marsilius, Jr., president. Producto manufactures precision die sets, die makers' accessories, toolroom equipment, machine tools and semi-steel castings.

Mr. Myers has been associated with Producto for the past 15 years and has been controller of the company since 1953. He is a member of the Society for the Advancement of Management, the National Office Management Association, and the Bridgeport Association of Credit Men.

★ ★ ★

A NEW spiral flute end mill that combines the advantages of a solid carbide cutter with the economy of a carbide tipped tool has just been introduced by the Nelco Tool Co., Inc., Manchester.

A true spiral flute end mill, this latest addition to the Nelco line has no bent or twisted carbide, but embodies a sandwich brazed, solid carbide insert correctly ground to precise tolerances. Special Nelco design increases rigidity to assure greater accuracy, is said to eliminate brazing strain and heat check to afford twice the production per tool.

Available in two series—for steel and for non-ferrous metals—new Nelco spiral flute end mills come in standard sizes from ½" to 1".

★ ★ ★

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of the American Marketing Association has recently announced an award program, open to undergraduates of colleges and universities in Connecticut and Western Massachusetts. First award is to be $100; second, $50; third $25, with five honorable mention awards at $10 each.

The purpose of the award program is to stimulate student interest in the methods of market research and market projection with particular reference to the New England area. Competence and depth of research, not necessarily quantity of detail, and interest and effectiveness of presentation, were given in the announcement as the proposed basis of judgment.

★ ★ ★

ALBERT W. CLOCK, president of The First National Bank of Litchfield, Robert G. Simpson, president of The Southington Bank and Trust Company, and Miles I. Stray, president of Charles A. Templeton, Inc., Waterbury, were elected new directors of the Connecticut Development Credit Corporation at its recent annual meeting. At the same time Joseph D. Linehan, manager of the CDCC, was also elected assistant secretary.

Paul V. Hayden, CDCC president, reported that fifteen loans totaling $615,000 were made by the Corporation in 1955, the first full year of operation. The purpose of the corporation is to provide financial assistance for business enterprises within the state that are unable to meet all their credit requirements from individual banks or other regular credit channels.

★ ★ ★

THE APPOINTMENT of Herbert C. Knortz as assistant comptroller, Royal Typewriter Company, Division Royal McBee Corporation, Hartford, has been announced by Alan W. Drew, company comptroller.

Before joining Royal, Mr. Knortz was associated with a large metal stamping firm as manager of the cost department. A certified public accountant, he holds a BBA degree from St. John's University, and MBA degree from New York University.

He is a member of the American Management Association, the American Institute of Accountants, and the National Association of Cost Accountants.

★ ★ ★

SIGURD SWANSON, president of the Apex Tool Company, Bridgeport,

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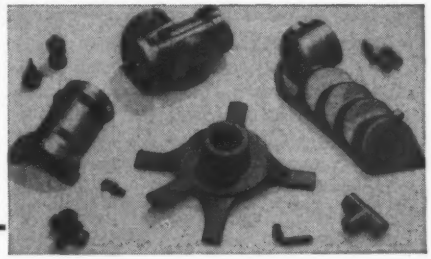

You can improve your product's sales, and performance after sales. Yes, you can help its ability to sell with castings by FRITZELL; porosity-free, uniform in mechanical and structural strength batch after batch; castings that give your customers satisfaction long after your sale is closed!

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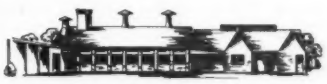

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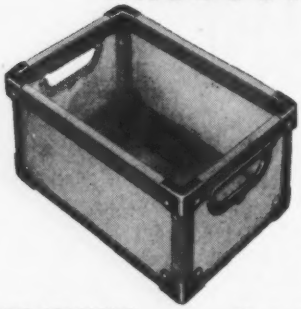

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died recently at Bridgeport Hospital three hours after he had been stricken at the wheel of his car.

Mr. Swanson retired a few weeks ago as president of the Bridgeport Chamber of Commerce. He was also chairman of the MAC Nominating Committee in 1955, presenting the nominees at the association's annual meeting.

★ ★ ★

NOW IN PRODUCTION at the Bridgeport Works of Underwood Corporation is a new low cost Composite Model E. Underwood Sundstrand accounting machine. The machine provides a choice of three simplified methods for billing and record keeping, and can be used immediately by any business which has accounts receivable. Readily suited to fit into existing bookkeeping systems, it does not necessitate extensive changes in office procedures.

In addition, a "mechanical brain" enables the unit to handle accounting functions, such as payroll, accounts payable, inventory and others.

★ ★ ★

THOMAS I. S. BOAK, president of The Plume & Atwood Manufacturing Company, Thomaston, has announced the receipt of a commitment from the Small Business Administration for a disaster loan in the amount of $1,-100,000.

The Plume & Atwood Manufacturing Company plant, size for size, was the worst hit in the August 19, 1955 flood. The office was entirely destroyed, including practically all business records.

The application for this loan was processed through the Waterbury office of the Small Business Administration, under the direction of Orrin T. Thorson, chief of the Disaster Field Office.

★ ★ ★

THE APPOINTMENT of James F. Roche as director of public relations of The Stanley Works, New Britain has been announced by John C. Cairns, president. His headquarters will be at the company's New York offices.

Mr. Roche, a native of New Britain, has been public relations director of Moore-McCormack Lines, New York shipping firm, since 1938, and prior to that was a member of the news staff of the New York Times.

He was graduated from the School of Journalism of Columbia University in 1925. During the war Mr. Roche served in Washington with the Maritime Commission and the Office of War Information, handling public relations for the late Secretary of State Edward R. Stettinius in connection with the nation's lend-lease program.

The company has also named Edward C. Benfield to the post of manager of publicity. Mr. Benfield joined the advertising department of The Stanley Works in 1950 and did advertising and promotional work for the hand tools division. In 1954 he was assigned to publicity work for the company. Previously, he had been associated with radio station WKNB, New Britain, and the United Fruit Company, Columbia, S.A. He was graduated from Pace College, New York City and Ohio Wesleyan University.

★ ★ ★

THE BURNDY ENGINEERING CO., INC., Norwalk, is using a specially constructed three-piece folding carton to package its salesmen's demonstration kit for an electricians tool. The carton is produced by the Thames River Division of Robert Gair Company, Inc., manufacturers of paperboard and paper products.

The three-piece unit consists of a one-piece, tuck-end carton, folded and glued to divide lengthwise into two decks, and two die-cut inserts which lock into the shape of drawers. The tool is packaged in the top deck of the carton, and the drawers—which hold strips of insulated wire and metal terminals—fit into the lower half.

A combination of flaps at each end of the drawers and die-cut semi-circles at each end of the carton's dividing shelf, enables the salesman to insert or remove either or both of the drawers easily. The filled carton can be carried in the saleman's pocket.

★ ★ ★

MERTON C. GRILLEY, factory manager of The Producto Machine Company, Bridgeport, manufacturers of precision die sets, die makers' accessories and machine tools, has been appointed vice president, it has been announced by Newman M. Marsilius, Jr., president.

Mr. Grilley joined Producto as an industrial engineer in 1950 and was named factory manager in 1953. A graduate of Northwestern University, he is a member of the American Society of Tool Engineers and the Society for the Advancement of Management.

AS THE J-57 engine goes into the fourth year of production, more than 2,500 of these powerful turbojets have been shipped from the East Hartford plant of Pratt & Whitney Aircraft. The engines shown here in final assembly power supersonic fighters, bombers and transports for the military services and are scheduled for installation in America's first jet airliners for intercontinental travel.

TOP-LEVEL EXECUTIVE changes, affecting personnel in the Hartford and Bridgeport works of the Underwood Corporation have been announced by David W. Crombie, vice president in charge of manufacturing.

Willard C. Jones, assistant works manager of the Bridgeport plant since 1953 will assume the duties of works manager in the company's Hartford plant. Armand A. Benoit, formerly assistant manager of the Hartford works will replace Mr. Jones in Bridgeport.

Mr. Jones succeeds Vincent F. Schneble as Hartford works manager. Mr. Schneble becomes consultant to the manufacturing department.

★ ★ ★

HAROLD E. JOPSON, vice president of Pratt, Read & Co., piano action manufacturers, of Ivoryton, died at Middlesex Memorial Hospital recently after a long illness.

He joined the Pratt, Read firm in 1910, starting as a mechanical draftsman. At the time Pratt, Read and the Comstock-Cheney Company, piano manufacturers of Ivoryton, were merged, Mr. Jopson was superintendent of both the key and action departments of Pratt, Read. Following the merger he was made general superintendent of the merged operations.

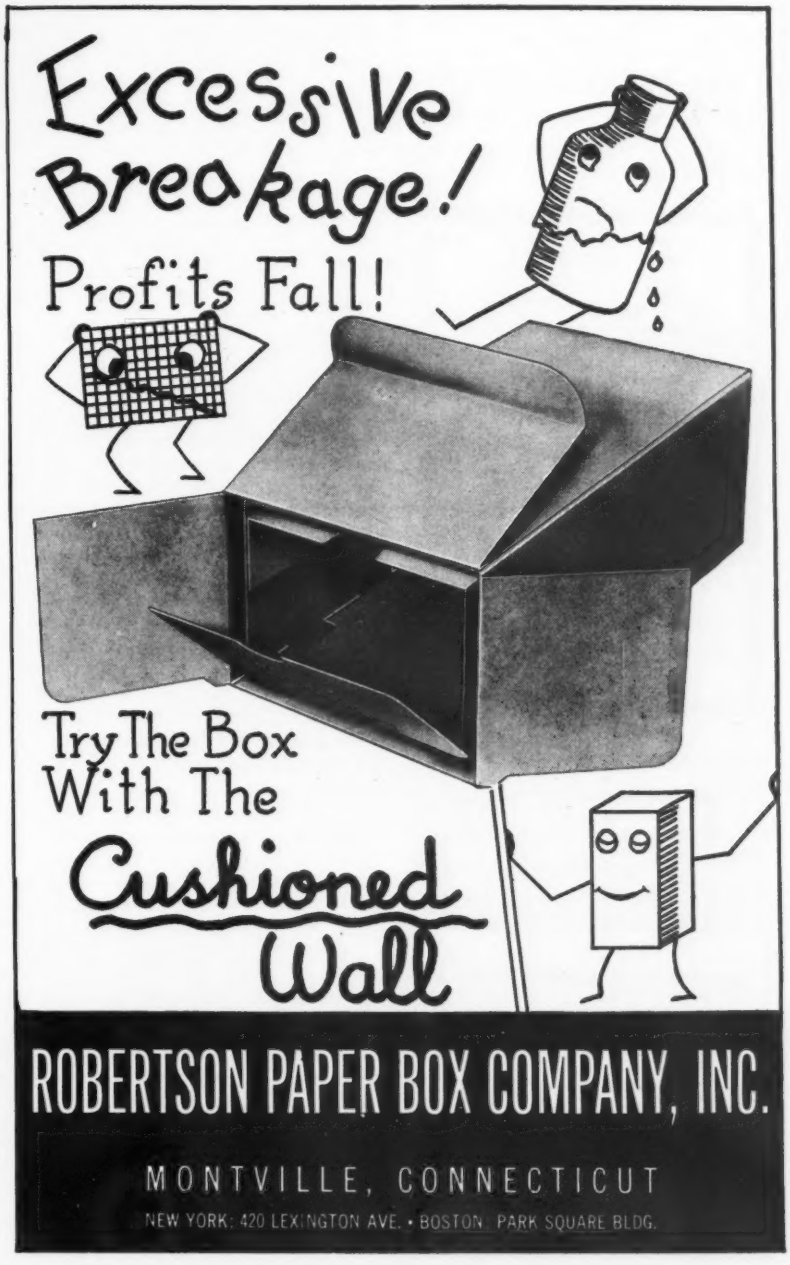
During his 45 years in the town of Deep River he was active in civic affairs. For 25 years he served the town as chief of the Deep River Volunteer Fire Department, served as a member of the Deep River School Board, was a member of the Deep River Baptist Church and of Trinity Lodge 43, AF and AM.

★ ★ ★

A MAJOR ADDITION to production facilities at the Wallingford plant of American Cyanamid Co. has been started, and plans are being drawn for expansion of the administration building, officials of the plastics manufacturing firm disclosed recently.

It is expected that the local work force, which numbers 950 persons, working around the clock, will be increased to 1,100 employees by the time the new production facilities are in full operation in the spring of 1957.

American Cyanamid makes resins and raw materials used by plastic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molders, laminators and other fabricators. A new thermo-plastic recently developed by the company will be produced in the plant addition. This plastic is copolymer, an acrylo nitrile, which will be used in the industrial chemical field.

★ ★ ★

ETHELBERT ALLEN MOORE, retired president and chairman of the board of The Stanley Works, New Britain, died recently at his winter home in Ormond Beach, Florida.

Mr. Moore worked his way up from clerk in 1889 to president in 1918 of one of New England's major manufacturers of builders' hardware. He was elected chairman of the board in 1923 and held that post and the presidency when he retired in 1929.

Mr. Moore was also a poet and painter and author of biographical and historical works, and had given generously of his property to the city of New Britain in the creation of its park system. He served on a dozen or more civic bodies.

★ ★ ★

A NEW TWELVE-PAGE catalog covering its complete line of hardware, built to Armed Forces specifications, has just been published by J. H. Sessions & Son, Bristol. Copies of the catalog may be obtained by writing to R. T. Alcott, sales manager of the company.

★ ★ ★

A NEW LINE of miniature Count-Centric expanding mandrels known as the "Micro-mite" has been announced by the LeCount Tool Works, Inc., Hartford. This is believed to be the first standard line of precision internal chuck type mandrels ever offered for bores between ¼" and ⅜". Only six sizes are required to handle every diameter bore within the range.

The Micro-mite expanding mandrels are designed to help precision instrument and electronics manufacturers meet the demand for miniaturization.

★ ★ ★

ARTHUR F. HAURY, president of The Harloc Products Corporation, manufacturers of the Pacemaker Precision-Built line of builders hardware, has announced the purchase of a large three-story plant located in West Haven, to provide better facilities and additional capacity for the firm's hardware output.

Harloc was founded in 1949 with the introduction of an entirely new line of

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precision-built lock and door sets that featured an exceptionally fine quality tubular-type latch. With attractive styling, fine packaging and easy-to-follow installation instructions, the line found excellent reception in the trade.

With the nation's building boom in housing and the trend toward faster construction methods to save both time and money, Harloc introduced in 1952 the Pacemaker line of factory preassembled latch sets and a key-in-knob lock set. Today the bulk of the company's production is devoted to the Pacemaker line. Harloc also features a line of Pacemaker screen and combination door locks and closers.

★ ★ ★

SOMMA TOOL COMPANY, INC., Waterbury, has just introduced a new line of super high speed steel cut-off blades with a superior hardness that permits unusually high speeds and feeds on automatic screw machines.

The company has developed a catalog page which gives details as to features, sizes and prices of the line, copies of which are available from the company.

★ ★ ★

RUSSELL C. KINSMAN has been named superintendent of works engineering for The Bullard Company, Bridgeport, it has been announced by Frank U. Hayes, vice president and assistant general manager.

A graduate of Bridgeport Engineering Institute and the University of Bridgeport, Mr. Kinsman was employed by The Bullard Company in 1940 and assigned to the electrical department. He became foreman of that department in 1949.

★ ★ ★

ALAN DAVIS, president of Econo Products Company, Inc., of East Haddam, has announced the election of John Glump to membership on the board of directors. Upon his election, Mr. Glump was promoted to vice president in charge of sales and advertising for the Econo Products Co., Inc., and its parent company, Viking Instruments, Inc.

Mr. Glump will direct sales for the Econo line of hot water circulators, low water cut offs, and other heating specialties, as well as directing sales for the Viking line of electronic instruments and controls.

★ ★ ★

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Rolling Mill Division of The Miller Company, Meriden, has completed the installation of one of the most modern cleaning lines in the brass industry.

The new cleaning line is 110 feet long and embodies all modern features of efficient operation and close quality control, according to the company. Its design was developed to fit the specific needs of the Rolling Mill Division. With rapid adjustments, both heavy and light gauge metal can be cleaned and conditioned in the one single line at speeds up to 600 feet per minute.

★ ★ ★

AS THE RESULT of a recent merger, the Plastics Division of the Colt's Manufacturing Company, Hartford, has become a wholly owned subsidiary of the Penn-Texas Corporation, and is now known as the Manufactured Products Corporation.

The new management has stated that important internal changes are being undertaken to increase the company's ability to meet customer needs for plastic packaging products and industrial parts, while providing a technical advisory service. Engineering, creative design and customer service departments are being expanded. The physical plant is undergoing complete reorganization for maximum productive efficiency; the most advanced manufacturing, materials handling and quality control methods are being incorporated.

C. W. Bentley is general manager of Manufactured Products Corporation.

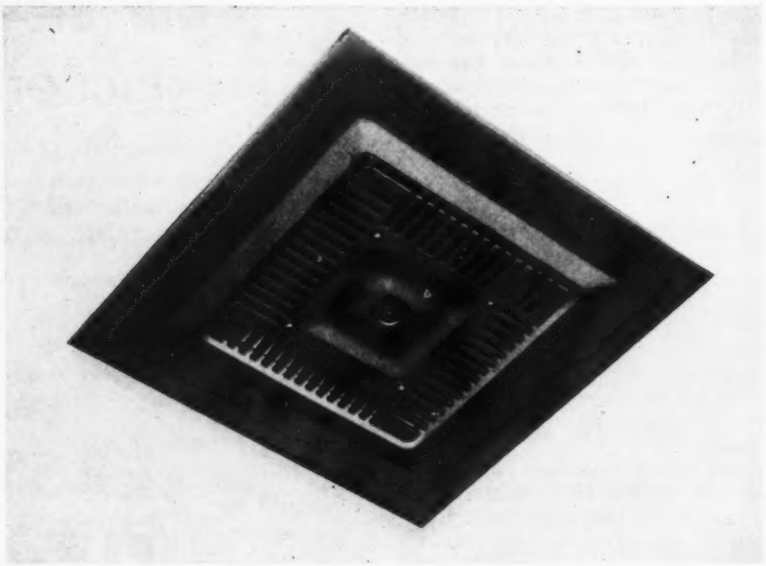
★ ★ ★

THE NUMBER OF TELEPHONES in use in Connecticut will more than double in the next 20 years, according to estimates made known by The Southern New England Telephone Company.

"The rate of development now indicated for the next 20 years will equal or exceed the rapid growth of the past five years," predicted J. Edison Doolittle, vice president and comptroller of the company, in a foreword to a booklet mailed to the company's 47,000 stockholders. Entitled "A Look Ahead at Connecticut and the Telephone Business," the booklet sets forth the company's long-range view of Connecticut's growth potential, in both telephones and population, through the year 1975. Also included are trends seen through 1959 in a five-year forecast recently completed.

★ ★ ★

FIVE MANAGERIAL personnel changes have been announced by The Seymour Manufacturing Company, Seymour, producers of non-ferrous metals.



VANDAL-PROOF CEILING AIR DIFFUSER by Connor Engineering Corp., Danbury. Designed to prevent removal, this modification of the Kno-Draft ceiling air diffuser is recommended for institutions and sanatoriums where tampering may be encountered. Mounted flush against the ceiling, with air discharge through slots which fit firmly against the outer plate, the outlet presents a sturdy, unbroken exterior to discourage attempts at damage.

Alexander P. Raeburn has been promoted to treasurer and will act as senior officer in charge of all financial and controller functions. John D. Berwick, Jr., has been appointed general superintendent in charge of the manufacturing division and Stephen J. Zelle has been named chief engineer in charge of the engineering and maintenance division.

In sales, Adolph W. Grele has become director of sales of all products, except phosphor bronze, which will be headed by Howard W. Thrasher.

★ ★ ★

THREE NEW MACHINES were exhibited by the New England Machine and Tool Company, Berlin, at the A.S.T.E. Industrial Exposition held in Chicago last month. The New England machines are sold through the nationwide sales organization of Pratt & Whitney Company, Inc., West Hartford.

Two of the machines displayed in Chicago were special purpose tracer-controlled milling machines, which utilize an original non-contacting tracer developed by New England.

★ ★ ★

FORMATION of a new Canadian subsidiary, Stanley Works Canadian Sales, Ltd., Montreal, to handle the sales of Stanley products in Canada, has been announced by John C. Cairns, president of the Stanley Works.

Stanley Works Canadian Sales Ltd. will succeed A. Macfarlane & Co., Limited, Montreal, which has represented the Stanley Works throughout Canada for the past 50 years in the distribution of Stanley hardware and Stanley tools. This company been disbanded.

★ ★ ★

A NEW jointly owned subsidiary company has been formed by Royal McBee Corporation and General Precision Equipment Corporation, under the name of Royal Precision Corporation.

The joint announcement by Philip M. Zenner, president of Royal McBee, and Hermann G. Place, president and chairman of General Precision Equipment, stated that the new company "will develop, produce and market electronic data processing and computation machines and accessory input and output mechanisms, storage devices, and code conversion equipment for complete data processing centers for office, scientific and laboratory use.

The new enterprise will utilize facilities of both parent companies, combining the technical knowledge of GPE in high precision products, including computers, with the distribution network and office equipment experience of Royal McBee.

★ ★ ★

CARL E. GUNTHER has been appointed chief engineer of Waterbury Tool, Division of Vickers, Incorporated.

A native of Rutherford, N. J., Mr. Gunther was previously director of research & engineering, Fuller Brush Co., Hartford.

He is a graduate of New York University with a Bachelors and Masters degree in Mechanical Engineering. He is a licensed professional engineer for the states of Connecticut, New York and New Jersey.

★ ★ ★

IN THE INTEREST of protecting the profit margin of independent jewelry and stationery retailers, Waterman Pen Company, Seymour, will con-

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GENERAL OFFICES: NEW HAVEN

tinue to uphold its Fair Trade Policy and to stop selling its line to anyone who advertises Waterman products below Fair Trade prices, it has been announced by George C. Holt, vice president in charge of sales at Waterman Pen Company.

"Our continuance of this policy is based on Waterman's recognition of the fact that independent jewelers and stationers must receive their fair margin of profit in order to maintain their standards of service, display and range of inventory," Mr. Holt said.

★ ★ ★

ELMER A. SCHWARTZ, president of Northeastern Steel Corporation, Bridgeport, has announced the appointment of John L. Cotsworth as manager of sales. In addition to the products of the open-hearth, hot-rolled-strip line, Mr. Cotsworth will guide the marketing of the specialty steels that will be produced by facilities under construction for the past year at Northeastern Steel.

These facilities consist of two new 35-ton electric furnaces that are now in production and an ultra-modern bar mill. The latter will make carbon alloy, stainless, heat-resisting, high-temperature, and tool steel bars and light shapes. It is expected to begin operating during the second quarter.

Mr. Cotsworth joins Northeastern Steel after five years in Canada with Atlas Steels, Ltd., where he was successively manager of stainless steel sales and manager of market development.

★ ★ ★

FOR THE SIXTH CONSECUTIVE YEAR, Raybestos-Manhattan, Inc., Bridgeport, has received the "Certificate of Management Excellence" award of the American Institute of Management.

The ten factors analyzed by the Institute are executive evaluation, sales vigor, production efficiency, fiscal policies, directorate analysis, research and development, fairness to stockholders, health of earnings growth, corporate structure and economic function.

Raybestos was one of 408 companies selected from more than 4,000 whose operations were examined in considerable detail by the Institute.

★ ★ ★

A NEW, 8-page booklet published by Waterbury Farrel Foundry & Machine Co., Waterbury, illustrates and describes continuous tandem wire drawing machines built by the company. The types covered include the drum, block and combination types for drawing brass, copper, aluminum, and other non-ferrous metals.

The bulletin contains large clear illustrations of machines with various types of drive and packaging arrangements. The modern features described in the text include construction and drive, die holders, drawing rolls, machine lubrication, die lubrication, four speed block drive, capacity and speed, accessory equipment and pooling. Copies are available.

★ ★ ★

A RECENTLY released bulletin announces the availability from stock of a large selection of Ni Span C Capsular elements for the aircraft and instrument industries, according to The Bristol Company, Waterbury.

Full engineering specifications and dimensions are tabulated in the eight-page, two-color bulletin. Also shown are diagrams and dimensions of spacers and typical end fittings for bellows assemblies. Copies of the bulletin are available from the company's Aircraft Components Division.

★ ★ ★

THE R. W. CRAMER COMPANY of Centerbrook, will exhibit at this year's I.R.E. Show in New York the most extensive and complete lines of electrical timing devices and synchronous timing motors in the company's history. Entirely new models, featured at this show for the first time, are the Type 412 and Type 422 Time Delay Relays, both capable of maintaining repeat accuracy said to be about twice the accuracy of previous models.

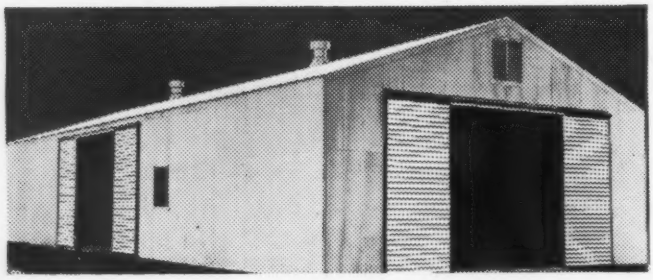
Operating demonstration panels in the Cramer booth will permit show visitors to observe actual operation of all Cramer instruments, including time delay relays, interval timers, cycling timers and time totalizers.

★ ★ ★

HARRY T. JACOBSON, formerly traffic manager of the Bridgeport Brass Co., Bridgeport, has been promoted to

Wise investment for industry and commerce

THE STRAN-STEEL®
RIGID-FRAME 40′ BUILDING



COMPARE THESE ADVANTAGES:

- Permanent, all-steel construction.
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- Standard steel sliding and walk-in doors, steel sash, louvers, ventilators and other accessories available with building package.

SPECIFICATIONS—40 ft. x 40 ft. with additional lengths in sections of 20 ft. Covered with 26-gauge galvanized steel sheets. Wall height, 14 ft. 6 in.
Stran-Steel Buildings are products of Great Lakes Steel Corporation, a unit of National Steel Corporation.

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THE TIME: The 12-month period ended December 31, 1955.

THE PRODUCT: DSC Cold Rolled Carbon Steel Strip and Flat Cold Rolled Carbon Spring Steel.

THE SOURCES: DSC's Detroit and Eastern mills.

THE QUANTITY: Millions of pounds.

THE SPECIFICATIONS: Just about everything "in the book" including specially restricted thickness tolerance, special temper, special finish, etc.

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the post of general traffic manager in charge of all traffic operations of the company.

Clifford G. Pearson, formerly assistant to Mr. Jacobson, has been advanced to traffic manager for the Bridgeport plants.

Mr. Jacobson joined the company in 1940. Three years later he was promoted to general traffic clerk and in 1946 was advanced to traffic manager of the Bridgeport plants.

Mr. Pearson joined the company in 1939 as a traffic clerk and became assistant to Mr. Jacobson in January, 1955.

★ ★ ★

THE AVAILABILITY of two scholarships for the 1956-1957 academic year has been announced by the Mills Division of the Scovill Manufacturing Company, Waterbury. Each scholarship will cover full tuition charges, laboratory fees, and other fixed charges of a similar nature at a college or university chosen by the recipient. Each scholarship will be awarded for one academic year, being renewed each year provided the students maintain a satisfactory scholastic and personal record; continues to work toward a degree in the engineering or technical field; and maintains a continuing interest in a position with the company.

Recipients will be selected from the following groups: Employees of the company, sons of employees of the company, other residents attending secondary schools in the greater Waterbury area.

★ ★ ★

A COLORFUL WALLCHART, containing operating information and illustrations of more than 120 standard Atrax solid tungsten carbide burs is now available from the Atrax Company, Newington.

One feature of this chart which fills a practical need is the handy, easily read Recommended Speed Table which prescribes the correct bur and RPM for most efficient work on any material from stainless steel to aluminum.

★ ★ ★

BERNARD CASTRO, president and founder of the Castro Convertible Corp., Danbury, has announced the promotion of Paul Barabas to the post of vice president.

Mr. Barabas has been with the Castro firm for 11 years, beginning as an apprentice upholsterer.

J. ROBERT KELLEY was elected president of Manning, Maxwell and Moore, Inc., Stratford industrial supplies manufacturer.

He succeeds Hamilton Merrill, who has retired after 35 years with the firm. Mr. Merrill will continue as a director and a member of the executive committee.

The firm has plants in Danbury, Watertown, Mass., Tulsa, Oklahoma, Inglewood, California and Muskegon, Michigan. It manufactures, among other things, pressure gauges and valves, electronics instruments, hoists and cranes and aircraft control components.

A native of Cincinnati, Mr. Kelley joined the firm in 1931. He held several executive positions before coming to the Stratford plant.

★ ★ ★

HARMON J. COOK, president of the Cornwall Patterson Co. of Bridgeport since 1939, died recently at the Lahey Clinic, Boston.

Born in Torrington, Mr. Cook was graduated from Sheffield Scientific School of Yale University. He was associated with the Hendey Machine Co., Torrington, until 1914 when he joined the Torrington Co. He was superintendent of the Torrington Co. until

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1923 when he joined the Trumbull Vanderpoel Co. of Bantam. He became president of that firm in 1926.

He is survived by his wife, two sons and two grandchildren.

★ ★ ★

CLARENCE G. GARRIGUS, manufacturing executive and inventor, died recently at his home in the Tylerville section of Haddam.

Mr. Garrigus began his industrial career before he was 20 years old, becoming superintendent of the Tucker Manufacturing Company. He started his own business in 1896 at the rear of his parents' home, designing and building chain machines and special machinery. He sold the business in 1902 and became mechanical superintendent of Landers, Frary and Clark of New Britain. In 1907 he organized the C. G. Garrigus Machine Company. In 1918 his interests in that company were sold to the Wallace Barnes Company.

He then took charge of the William H. Bristol Laboratory in the early development of talking motion pictures designing, and in 1930 joined his son, Alfred C. Garrigus in the C. G. Garrigus Co., organized in Haddam in 1921.

Besides his wife and son he leaves a sister, three grandchildren and four great-grandchildren.

★ ★ ★

THE APPOINTMENT of Gordon P. Cushman as assistant secretary of the International Silver Company, Meriden, has been announced. Mr. Cushman succeeds George Osborn, who has retired from this post, and is also tax accountant and assistant to the vice president and treasurer.

Mr. Cushman has been with the International Silver Company for 14 years. Starting in the accounting department in 1942, he was appointed chief cost accountant in 1945 and ten years later became assistant treasurer of Times Wire and Cable Company when the company became a subsidiary of International.

Replenishing Our Talent Pool Deserves High Priority

(Continued from page 15)

these same skills to the society in which they lived.

The democratic view is that the student should be trained as an individual, and that he should receive a broad cultural background on which his individual opinions can be backed by good judgment. This does not mean superficial training. It does mean that, at an early age, each child should be taught the value of self-discipline, both in the home and at school, and that the application and acquisition of general knowledge should be based upon a gradual evolution of the individual's character.

Emphasis on this, in the primary program, can gradually be diminished during secondary schooling, when the student should begin to investigate various areas of specialization in which he shows aptitude and interest. This area of interest should not, however, be over-emphasized. In the complex society of today, a sound background in which a person has learned how to think rather than what to think is essential. Following the secondary educational program, the student, having reached an age where the necessity for earning his living has become apparent to him, will then be in an intellectual mood to apply himself to the elements of specialization, whether they be in mechanical or electrical science, physics or theoretical engineering.

The need for producing more young people who want this concentrated study, beginning at the age of 17 or 18, is indicated by the fact that, in 1900, the national average shows that 1 engineer was employed to every 250 general workers. Fifty years later, the ratio had been reduced to 1 to 60. Currently, it is closer to 1 to 10.

Obviously, the skills required for various kinds of engineering can be built only with certain educational tools, the most important of which is fundamental knowledge, without which no one can make adequate decisions. Recently, Dr. Maynard Boring, Chairman of the Engineering Manpower Commission and consultant to General Electric said, "The shortage of engineers is going to be with us for a long time. Industry will just have to learn how to get the job done with the engineers it can get". He then went on to explain that, for a long time, industry had three alternatives:

1. The wider use of electronic computing equipment.
2. Employment of more women engineers.
3. Greater use of technicians.

Because technical institutes have geared their programs to graduate a skilled man after giving him two years

of post-secondary school study, it seems apparent that this form of education provides the quickest way of meeting the manpower shortage. Since it is a terminal program, those who lack the initiative or ability to go further will find full measure of use for their capabilities. Those who do wish to continue will find that, through evening and part-time study, they can use the training they have had to support themselves and their families while they study for engineering degrees.

To make such an educational program possible, there can be no doubt but that the level of teaching must keep pace with the advancement of our technology. Industry has here a remarkable opportunity. Most of our public school teachers have summer vacations during which they could be profitably employed by industry; thereby gaining practice in the theory they teach in the classroom. Guidance counselors could be given jobs in personnel and in public relations departments, thereby acquainting them with the specific needs of the industry for which they were working. Science teachers could be given scholarships to take summer courses in universities or on-the-job training, free-of-charge, in those industries which maintain a training program of their own.

Perhaps most important of all is the desirability of study conferences in which the engineering foreman, industrial management and various types of educators confer. These should be continuing programs. To some extent, employment of teachers, on a part-time basis, would touch on the most serious problem we face today, and that is to give the teachers sufficient financial incentive to keep him on his job. The very nature of our society suggests that the teacher himself would benefit if his income could be somewhat adjusted to his ability to produce, rather than upon a job classification in which no additional renumeration could be expected for personal achievement. The recent donation by the Ford Foundation, designed to increase instructor pay in universities, is a step in the right direction, because it is ridiculous to expect that we can obtain first-rate technicians and engineers trained by third-rate teachers.

In the private school, particularly the community college or the technical institute which has not been liberally endowed, industry has a fertile field in which to plant its own seed of philosophy. In such institutes, which must produce quality if they are to survive, industry can increase the incentive by offering part-time scholarships; these scholarships to be given in proportion to the number of graduates it hires and the value of that education to the company which would otherwise have to provide technical training. It can offer part-time work to enable students to earn their own living while they are studying even though such employment may not be profitable. It can provide opportunity for research for the instructors, so that they may keep abreast of industrial needs; and it can contribute to the administration of the institute itself in ratio to the value of the services provided through its graduates.

The necessity for immediate action has been stated time and again. Today, the energy exercised in our industry and the expansion of our facilities is not the desire for a better standard of living nearly as much as it is a recognition that our survival depends on a strong economic and industrial structure in which the inventiveness of man guarantees some form of protection in the nuclear world of tomorrow.

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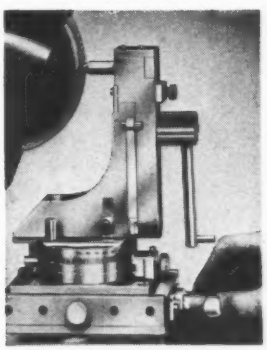
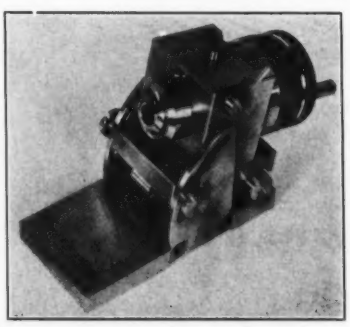
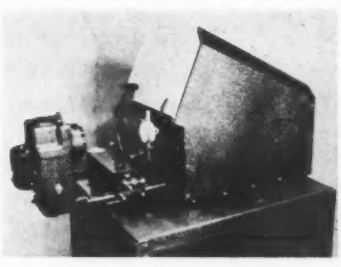


J & S 'FLUIDMOTION' WHEEL DRESSER



MASTER GRINDING ATTACHMENT



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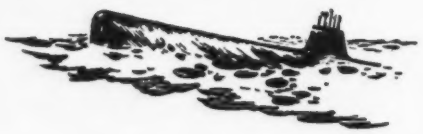
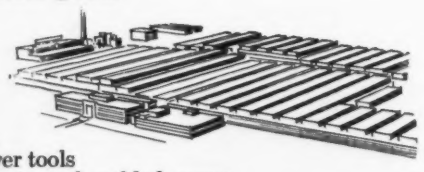


The world's first practical military submarine was the "Turtle," built by Connecticut's David Bushnell. Used in the Revolution, this eight-foot craft was a tactical failure but a psychological success . . . giving the British a bad case of jitters.

Today's ultimate achievements in undersea power . . . the atomic-powered "Nautilus" and "Seawolf" . . . are also triumphs of Connecticut productive genius. Selected for use in constructing these mighty submarines, and included in the repair kits carried aboard, are Pratt & Whitney Carbide Burs . . . small, versatile metal cutters used in power tools to file, shape and finish the hardest parts and welded seams.



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HOW WOULD YOU DECIDE?

In this department each month there will be published labor relations grievances that were settled by arbitration. Read the grievances and check your opinion against the arbitrators ruling. Selection of cases made by MAC counsel.

Does a union steward's superseniority gave him the right to remain on the day shift?

Here's What Happened.

The employee in question was originally hired for the day shift operation at a time when there were both day and night shifts in that department. Subsequently the night shift was discontinued, but later was again put into operation. The employee, being a department steward, was assigned to the day shift because of his superseniority as a steward while another employee with more actual seniority was assigned to the night shift. The company then carefully examined its contract and concluded that a steward's superseniority did not prevent his being transferred from the day shift to the night shift as the superseniority given stewards applied only "in the event of a lay-off." The steward also claimed that since he was hired for the day shift he could not be transferred to the night shift although the contract provided that such transfer could be made "when necessary."

Do you think his superseniority gave him the right to stay on the day shift?

The arbitrator came to the conclusion that the employee with the greater length of service was entitled to remain on the day shift since the clause giving the steward superseniority applied only when there was "a lay-off for an indefinite period" and that clause was not applicable to the issue involved. There was no reduction in the personnel of the department, but it was merely a redistribution of the employees, and the work, from the day shift to a day and night shift. The arbitrator also rejected the claim that an individual hired as a day shift worker has any inherent right to remain on the day shift especially when the contract mentioned the possibility of transfer to the night shift and provided that "the least senior qualified employee in the occupation involved shall be the first transferred."

Was the company justified in sending employees home when they suddenly decided they would no longer perform a particular aspect of their work?

Here's What Happened.

The employees in question were inspectors who had, over a period of years, obtained tote boxes used in conjunction with their inspection work from a supply in their department. On the days when they were sent home they had refused to obtain these tote boxes, claiming that the job description for "inspector" did not include a requirement that they get these boxes themselves. However, there was no provision in any job description, including that of "trucker" which specifically mentioned tote boxes. The only issue before the arbitrator was whether or not the company was justified in sending the inspectors home for refusing to do the work. The question as to whether getting the empty tote boxes is properly part of the business of inspector or some other job was not submitted to the board. The union claimed that an employee can only be required to do the work covered in the job description regardless of what the past practice had been and that the employees had the right to refuse to do the work and were not obliged to wait for an arbitration decision to correct what they claimed was a violation of their rights.

Were they justified in refusing to do the work or should they have

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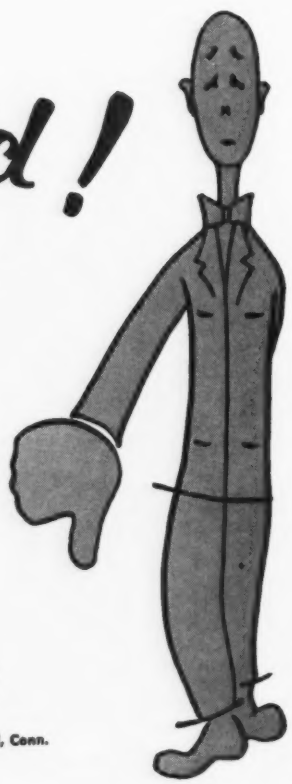

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followed instructions of the foreman but filed a grievance?

The arbitration board decided that it was to avoid just such occurrences that grievance procedures have been incorporated in labor contracts. Even the union conceded that an employee refusing to obey an order of his supervisor does so at his peril. The board felt that to uphold the union's contention that the company cannot require employees to perform any work, however minor or incidental, not specifically covered by the job descriptions, would be unrealistic in the extreme. Under the circumstances, the board felt that the company offered the only possible alternatives to the employees.

Was the company justified in discharging a night watchman because of his physical condition?

Here's What Happened.

The employee had been working as a watchman for about nine years during which a multitude of physical disabilities had compelled him to be away from his work for four and a half years. He had had several operations and had fallen while at work several times in addition to suffering from other physical disabilities. The company claimed and offered evidence from its plant physician that it was dangerous to the well being of the employee to continue him in his job as a watchman. If he suffered another fall when no one was around, it might be quite a while before he was discovered. Furthermore, the very nature of his duties as watchman placed on him the responsibility of the safety of the plant and his fellow employees. A watchman's duties require that he be in reasonably good health.

Would you think the company was justified in removing him from the job?

The arbitrator agreed with the company that it has an obligation to avoid exposing its employees to undue hazards to their health and safety. The company has a right to remove an employee from a job which gives rise to serious danger to himself and to others. This is so even though the employee denies there is any hazard or states he is willing to undertake the risk to his own safety. Under all the circumstances, the arbitrator felt the company's action was appropriate to protect not only its employees but the watchman himself.

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SPOTLIGHT ON THE FUTURE*

By MARSHALL PEASE
Assistant Manager of Purchases
Detroit Edison Company
Detroit, Michigan

General Business Conditions

THE stability of general business, at a high level for the past three months, continues to hold that even pace in the March survey of Purchasing Executives. On production, the reports show 33% having increased output, 1% greater than last month, while 57% report production the same, which is also 1% higher than February. A production decline is shown by 10%, against 12% a month ago. A similar pattern is shown for new orders with 33% reporting better order positions, 50% the same, and 17% receiving less volume. This compares with 30%, 52% and 18%, respectively, in February.

The reports indicate an acceleration in the upward trend in industrial materials prices, with ferrous and nonferrous metals leading the way. The slight increase in employment is expected to improve further with the arrival of Spring; and the shortage of skilled workers will persist, say the Committee members. Inventories are up slightly, while little change is reported in buying policy.

Of those who answered a special survey question, concerning the projected demand for consumer durables, 54% thought the demand was holding its own; 37% saw it slipping, and 9% said this demand is improving. The consensus was that credit obligations incurred during last year's record sales would act as a deterrent to further extensions of individual debt at this time.

Commodity Prices

Last month's reports from Committee members who saw no relief from current high prices, might also well have read, "no relief from probable *higher* prices." In March, the number listing price advances increased 10%, to 68%, from February's 58%. Price decreases were reported by only 1%, compared with 3% last month, and 31% indicated prices the same as in February.

Inventories

In March, 32% of the Committee members report inventories higher, against 30% in February. They attribute this largely to the good production rates of suppliers, and a build-up of steel items against price increases or labor difficulties. No change is reported by 57%, compared with 55%, a month ago, and 11% report lower stocks, compared with 15% last month.

Employment

The number of people on the pay rolls of the reporting Committee members remains substantially the same. There were 66%, compared with 71% in February, who said employment figures are unchanged; a slight increase, from 20% to 23%, among those who saw some improvement; 11% reported a decline in employment, against 9% last month, with many of them optimistic about an upturn with better weather and settlement of local strikes.

Buying Policy

There are very slight changes in forward purchasing plans shown in the March reports. On production materials, 38% report a 90-days-plus policy, with 4% on a hand-to-mouth basis. In February, the statistics were 36% and 5%, respectively. The reports show 21% in the 30-day bracket and 37% planning 60 days, against 21% and 38% on production items in February. For MRO supplies, 16% buy hand-to-mouth; 38% report 30 days; 32% say 60 days, and 14% at 90-days-plus. For capital goods, 9% show 60 days; 19% cover for 90 days, and 64% extend six months to a year, with 8% in the 30-days-or-less range.

Specific Commodity Changes

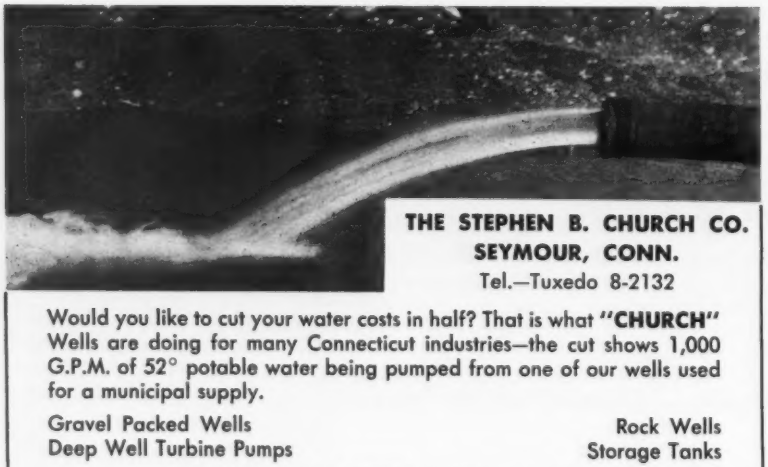
Copper price increases are reported by many and led a general upward price movement in March.

On the up side are: Brass and brass products, bronze ingots, copper and copper products, steel, castings, tin plate, selenium, linseed oil, alcohol, nitrogen, acetone, paper, kraft, multiwall bags, lumber, coal, fuel oil, lubricating oils, oxygen, carbide, acetylene, paints, freight rates, valves, pipe fittings and fasteners.

On the down side are: Steel scrap and rubber.

In short supply are: Aluminum, copper, nickel, steel, (pipe, plate, structural, stainless, shapes, sheets and many products), selenium, titanium dioxide, methanol, paper, kraft, cellophane, newsprint, synthetic rubber and cement.

* *Composite opinion of purchasing agents who comprise the N.A.P.A. Business Survey Committee, whose Acting Chairman is Marshall Pease, Assistant Manager of Purchases, The Detroit Edison Company, Detroit, Michigan.*



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ACCOUNTING HINTS

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Operations Research

A New Management Tool

One of the newest scientific management techniques is called Operations Research. It is a comprehensive term which has been coined to describe the general application of scientific research methods to the solution of business problems. The success which has been achieved in the sciences in producing the material improvements of our current civilization make it logical that the same organized, specially trained concepts of thinking be applied to the management of enterprise.

In attempting to understand this technique it is helpful to discuss the activity to which it is being applied. The management of an enterprise is a highly complex activity which has as its main unit of output, decisions. These decisions are only as effective and as valuable as the completeness and accuracy of the information upon which they are based. This simple truth has been generally recognized for a long time and those producing the decisions go to considerable length to be sure that there is a firm and comprehensive framework of facts upon which they can base their judgments. To this foundation of facts executives add, where necessary, further evaluations based on experience and intuition.

Operations Research is an extension and improvement of present information gathering processes. It offers new methods for organizing and evaluating the survey data through advanced methods such as linear equations, statistical probability theory handling complex variables, and mathematical formulae. So advanced are some of these techniques that the trained research analysts must also in some cases outline the problems which they are capable of solving as well as work out the solutions. To illustrate: A manufacturing business may have used a percentage of its raw material requirement as an additional factor to be added to each of their orders for raw materials to cover normal losses due to in-process scrap, defective material, etc. This percentage may have been in use for years, an accepted routine part of the business for which no further study is ever made. The task of the trained Operations Research technician begins with the identification and presentation of this routine condition to management as a basis for further study and possible gain. Ultimately he may be able to provide a more exact excess raw material contingency requirement with a resulting savings in cost.

The Relationship of This Technique To Other Survey Methods

In reading the description of this Operation Research concept, the reader may reasonably determine that there is a similarity to established methods for making surveys and studies. There definitely is a close inter-relationship of all the specialized examinations conducted in all areas of management. Actually any examination to determine what constitutes the best decision to apply under a given or variable set of circumstances is a form of operations research. The term itself is one which has been adopted by the more highly trained practitioners to describe their more advanced approaches as compared to the studies made on a supposedly less organized basis. In many cases an excellent rewarding operations research study can be made by one with no formal training and it can produce a basis for decision adequate for the particular problem.

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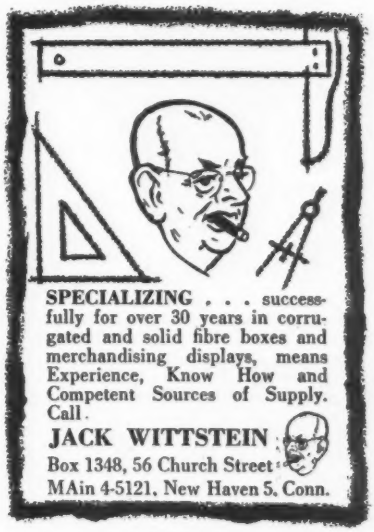
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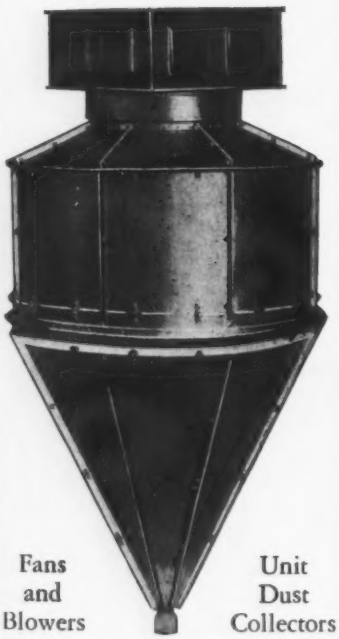

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There is no clear-cut line separating problems requiring a highly specialized approach as compared to those where solutions can be developed more easily. As the field expands the areas to which these scientific techniques can be applied will be more clearly apparent and experience of similar case studies applied to problems in other companies.

In future years this technique will be an aid to management in offering in advance, a scientific analysis of the probable effect of their decisions.

Romance of Clark Bros. Bolt Co.

(Continued from page 8)

Bros. at the age of 14, starting out as office boy.

Recalling his start with the company, Mr. Knapp explains that his intention was to try out the work during a school summer vacation in 1903. He's been with the company ever since, his rise through various posts culminating with his appointment as President in 1946.

His organizational talents and interest have kept Mr. Knapp active in the Bolt and Nut Industry. He helped form the Industrial Fasteners Institute in 1930 and served as the organization's first Secretary. He has also been a member of the Executive Committee and held the post of Vice President of the Instiute, highest elective office of that organization, and is presently Chairman of the Research and Advertising Committee.

He has also served as Industry Member on the Advisory Committee for the Bolt, Nut and Solid Rivet Industry in Washington, on both Office of Price Stabilization and National Production Authority.

An energetic person, Mr. Knapp's outside interests and community service activities are many and varied. One of the founders of the Southington Savings and Loan Association, he was the first Treasurer and is presently President of this Association which was formed to aid people in purchasing homes.

He is also a Director of the Southington Bank and Trust Co. and a Vice President and Director of the Manufacturers Association of Hartford County.

His civic affairs activities have included membership on the Southington Finance Board, service as Asst. Treasurer and a member of the Board of Trustees of the Bradley Memorial Hospital of Southington, and a director and chairman of the Budget Committee of the Southington Community Chest.

Vice President of Clark Bros. is Dudley H. Smith, whose association with the concern began as a salesman covering the Midwest area in 1929. Brought into the home plant as Sales Manager in 1941, he was advanced to Vice President in charge of Sales in 1952. He is Vice President of the Bradley Memorial Hospital.

Other company officials are Wesley B. Scott, Secretary and Purchasing Agent and a Director of the Purchasing Agents Association of Connecticut, and Miss Catherine J. Lamb, Asst. Secy. and Asst. Treasurer who has full charge of accounting. Otto H. Reisch is Superintendent.

Clark Bros. Bolt Co., by teaming traditional New England insistence on quality with a progressive outlook willing to explore new production, marketing and sales techniques, has prospered through the turbulent years of its first century in business.

With the experience and traditions of the past as a guide, and forceful, forward-looking management as the motivating force, this proud Connecticut concern eagerly anticipates its next century of serving American industry's fastener needs.

Engineering Education For The Future

(Continued from page 17)

inevitable in view of the demand and the higher salaries now paid to graduates with advanced training. Stronger measures apparently are needed now in order to increase the number of students taking full time advanced work. While there will be larger graduating classes at the undergraduate level in the near future, nevertheless with the increase in demand likely even at this level, due to the increased mechanization, the shortage is likely to continue.

When one considers the long range problems which face us in the physical world due to the depletion of our present natural resources, it is quite clear that simply to continue to exist as a nation, and as a people, will require tremendous progress on the frontier of physical and engineering science. This is the field and frontier battlefront for which our engineering colleges are preparing their graduates today.

BUSINESS TIPS

from

School of Business Administration

University of Connecticut

Cutting Clerical Costs

By L. F. BOYCE, JR.
Instructor in Accounting

THE RICH American market is a wonderful place to do business. There are more customers than ever before and the per capita purchasing power of these customers is substantial. Best of all, there is a willingness to buy based on confidence in the future.

Prosperous workers are good customers for many businesses, but their income represents a high relatively fixed cost to their employers. Once upon a time, the major portion of labor costs varied directly with production volume, but today a substantial portion of the payroll is a fixed expense as long as a business operates at all. The widespread willingness to buy, that is common today, is sustained by the confidence of workers in their job security.

The high break-even points resulting from substantial fixed costs (including labor) make a high volume of production and sales essential to survival. Rather minute savings in unit cost become significant when production volume is high so successful plant managers are alert to discover and apply cost-cutting techniques. During the past thirty years, the national productive output has expanded about 150% with only an increase of 50% in productive workers. During the same period, the growth in clerical forces has about equalled the 150% increase in productivity. Despite the widespread improvements in communications and business machines, very little progress in cutting clerical costs is noticeable.

Presumably, the major portion of increased clerical costs are borne directly by the relatively small percentage of companies that do the major portion of business in our economy. These large companies often have branches scattered over a wide area and many of them have adopted decentralized management techniques. They establish a series of cost centers within their organizations and hold the managers of the cost centers responsible for profitable performance in their areas of authority with a plan for supplemental compensation based on results produced.

If a company's operations are confined to a small geographic area, the logical procedure is to retain centralized accounting regardless of the other organizational arrangements. However, the company with branches scattered over a wide area must choose between doing its accounting work locally to a large extent or centralizing as much of it as possible.

Centralized accounting looks very attractive from a cost viewpoint because it usually results in enough volume of work to justify employment of expert accountants and profitable utilization of machine accounting techniques. The plant managers are not always so enthusiastic about accounting centralization; they have little or no direct contact with the accounting department and wonder why it takes so long for the accounting data they need to reach them. Operating management is sometimes justified in contending that a centralized accounting department sacrifices speed of reporting in order to refine accounting data needlessly for internal operating reports.

As a result, many companies with scattered branches have decentralized accounting to a considerable extent despite the cost of duplicating personnel and equipment at many locations. Un-

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til recently, these companies had to accept the higher cost of decentralized accounting or forego some of the advantages of local managerial authority and responsibility. The development of high speed electronic data processing equipment may change the situation for those companies whose managements are alert to the new possibilities.

Basic data such as sales orders, purchase orders, production orders, inventory requisitions and time cards can be recorded on punch cards originally and then be transferred to magnetic tape by using a card-controlled tape punch at the branch office. The tapes can then be transferred by telegraph to the central accounting office, fed to an electronic computer through an input device and be processed at rates up to 15,000 characters per second. An aircraft company in California completes an hourly payroll of 1,500 employees in about one hour on an electronic computer and each of the nearly one million calculations performed during the hour is checked automatically to prevent error.

Setting up instructions for the computer to follow requires considerable time, but once the program has been developed it may be used over and over for the numerous repetitive clerical tasks common in industry. With appropriate programming, computers can give prompt information based on scheduled production as to what parts and supplies will be needed and when. If combined with other equipment the computers will prepare the purchase orders for the items needed or the production orders for the parts to be made. By application of linear programming techniques a computer will analyze all the factors provided and decide whether a part should be made or bought and if bought, from whom. In other words, fast effective inventory and production control is possible despite scattered locations and diverse operations.

The purchase prices of computers go up as high as $2,000,000 and computer rentals range from $6,000 to $500,000 a year depending on the capacity and speed of the computer so the possibility of clerical cost savings depends largely on the volume of work to be processed. If the ability of a computer to compare all sorts of objective alternatives and come up rapidly with the best choice is used, the potential savings may be great.

Naturally the advantages of computer systems apply to centrally operated companies as well as the business spread over a wide area, but the company with decentralized accounting may be further behind on the uses of accounting equipment capable of handling a large volume of work. The intensity of business competition today leaves little time to get started on an analysis of the feasability of computer use in a particular company. Just making a study of whether or not it is desirable to shift to computers may take several trained people a full year unless the company has experience with conventional punch card systems. The actual conversion from a conventional accounting system may require two or three more years. The job is a big one, but the potential results are in line with the effort required.

State's First Group Medical Service For Industry Celebrates Tenth Anniversary

(Continued from page 11)

from the employees covered. One member states: "Our group medical service has contributed greatly toward a much improved safety record, better employee health, less absenteeism, improved management-labor relations, and better productivity. It is, in our opinion, an essential part of good management for a small industry."

The greatest asset any company has is its people. The loss of working time, regardless of cause, is increasingly more expensive. According to the American Management Association, "the medical dollar produces more than any other dollar spent by industry."

Health maintenance is a typically American concern which employers share from both a human and economic standpoint. The worker obviously needs protection against industrial disease or injury, against a job for which he is medically unfitted, against losing unnecessary time from work. Management, too, needs protection against the existence of unsanitary or unsafe plant conditions, against applicants who may be accident-prone or poor compensation risks, and against employees who are misplaced or low producers. Industrial medical care is one of the most effective ways in which management can practice individual treatment of its employees: It is a powerful deterrent to propaganda for socialized medicine. This is the overall objective that the Hartford Small Plant Medical Service keeps firmly in mind as it enters its eleventh year of operation.

BUSINESS PATTERN

A comprehensive summary of the ups and downs of industrial activity in Connecticut for the thirty day period ending on the 15th day of the second previous month.

THE index of general business activity in Connecticut rose two percentage points in January to an estimated 20 per cent above normal. A sharp increase in freight shipments was the main factor in the rise. The cotton activity component also contributed materially to the improvement and employment rose moderately after seasonal adjustment. Construction, meanwhile, declined slightly and manhours remained constant.

In January the United States index of industrial activity remained unchanged from the December level at an estimated 16% above normal. Strength in steel was supplemented by advances in the food, lumber and paper and printing components.

Federal Budget

The federal budget for the fiscal year ending June 30, 1956 now indicates a surplus, although slight, for the first time since 1951. The proposed budget for fiscal 1957 also reflects a small surplus of $400 million, somewhat larger than the $200 million predicted for fiscal 1956.

For 1957 receipts are expected to increase by $1.8 billion to $66.3 billion and expenditures by $1.6 billion to $65.9 billion. The rise in expenditures will be the first since 1953 during which time they declined a total of $10 billion. Defense outlays will increase $1 billion in 1957. This item continues to be the main expenditure amouting to 61% of the total budget.

Unemployment

Claims on file for unemployment compensation in Connecticut during the week ending February 11 totaled 21,600, a slight rise from the 21,300 recorded in the previous week. A temporary layoff of 700 by a primary metal mill was the predominant factor. The current figure reflects considerable improvement over the 33,700 on file during the corresponding week of 1955.

Initial claims stood at 3,500 compared with 3,900 during the same week of last year.

Employment

In January manufacturing employment in Connecticut declined slightly from 429,800 to 428,700 after increasing for five consecutive months. Since January 1950 this important indicator of the State's industrial tempo has risen 76,700, a 22% improvement.

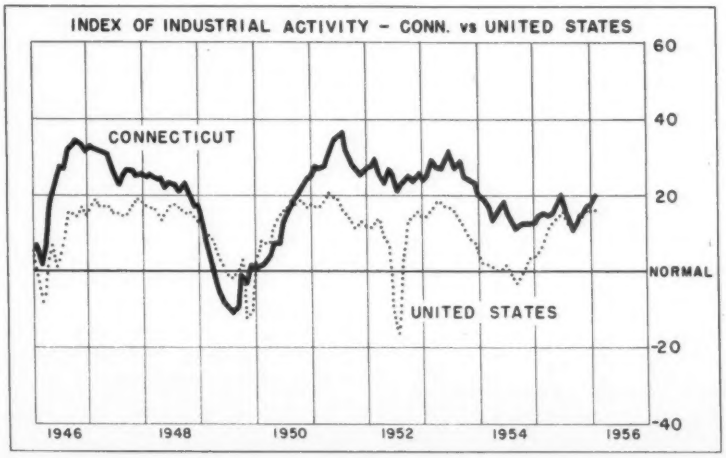
There are more manufacturing workers in Hartford than in any other State labor market area. However, Bridgeport leads the other major areas both in numerical and percentage increase since January 1950.

Manufacturing Employment

Area	*Jan. 1950*	*Jan. 1956*	*% Incr.*
CONNECTICUT	352,000	428,700	22
BRIDGEPORT	53,300	72,000	35
HARTFORD	57,700	75,900	32
NEW BRITAIN	23,500	29,400	25
NEW HAVEN	39,000	46,200	18
WATERBURY	37,800	44,000	16

Freight Shipments

Freight shipments originating in eight Connecticut cities in 1955 were 25 per cent greater than the tonnage recorded during the previous year. Carloadings of revenue freight for the country as a whole during the same period, as reported by the Association of American Railroads, increased by 12 per cent.



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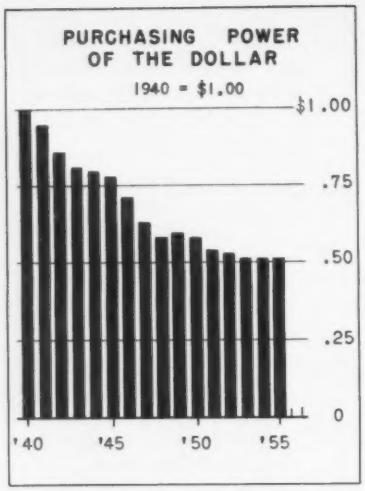
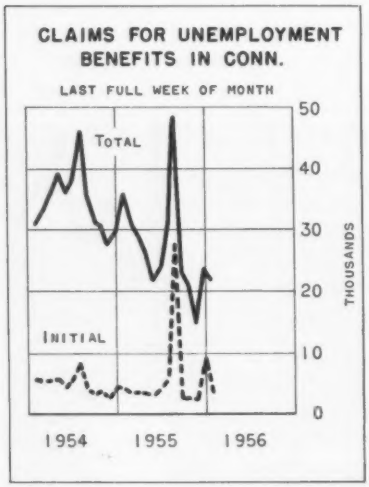


Gross National Product

Gross national product reached a record high in 1955 at $387 billion with consumer consumption leading the rise. This represents a 7 per cent improvement over 1954 and surpasses the former peak year of 1953 by 6 per cent. A steady increase was recorded throughout 1955. The rate of rise, however, slowed somewhat toward the end of the year due to a leveling off of consumer spending.

Purchasing Power

As the chart shows, the purchasing power of the dollar has declined substantially since 1940. By 1948 the purchasing power of the 1940 dollar had dropped to 56 cents. Since then, however, the rate of decrease has slowed considerably and during the last three years the purchasing power of the 1940 dollar has remained stationary at 52 cents.



Association Endorses Plan To Eliminate Punitive Taxes

(Continued from page 13)

These figures take no account of the additional expansion of the tax base which will surely follow from the increased plant investment made possible by the operation of the plan. The proposed tax reductions would average just short of $2 billion annually over the five-year period. It is estimated that only $5.6 billion is currently being invested in new production facilities. Since the $2 billion which would be released by the plan are primarily savings dollars—as distinguished from consumption dollars—it may be expected that much of this money will find its way into an expansion of the nation's production facilities—a potential of nearly 36% above the present investment rate.

In studying this and other plans for reforming the federal tax structure, the Association's Taxation Committee gave careful consideration to President Eisenhower's recommendation that in these prosperous times first priority should be given to balancing the budget, and within a balanced budget, at least some start should be made toward a reduction in our national debt before any tax reductions are considered. The committee unreservedly supported the soundness of these principles, but concluded, after balancing the fiscal situation of the federal government and anticipated budget requirements against the President's extremely modest estimates of tax revenues and the tax-generating potential of the five-year plan, that the two ideals of tax reduction and debt reduction can both be realized this year.

Indeed, unless all economic forecasts should prove to be wrong, swelling federal tax revenues very shortly will indicate a surplus substantial enough to permit both a reduction in the national debt and in tax rates. As this is written, that is the general assumption. If correct, the only question will then be, what kind of tax reduction shall we have? Shall it be sprinkled about in such a way as to add a few dollars to everyone's pocketbook, or shall it be prudently used pursuant to a plan, such as the NAM plan, which is designed at the same time to strengthen the national economy and to ameliorate the most glaring inequity in the tax system? The committee decided that the latter alternative is the one worthy of support.

The committee also gave serious consideration to the question of whether a plan of tax reduction which is intentionally and openly designed to relieve a minority of taxpayers of the burden of discriminatory rates can gain enough public support to make its adoption possible. There is substantial evidence that it can. In the most recent survey on this subject by the American Institute of Public Opinion, conducted early in 1955, it was found that 53% of the public would favor a 35% income tax limit, 36% would oppose, and 11% had no opinion. A significant fact about that poll was that the question was put bluntly without any indication that a 35% top could be achieved without shifting tax burdens. The conclusion of Dr. George Gallop, Director of the Institute, is "if the public itself were to set federal income tax rates, it would make families in the lowest income brackets pay more tax than they now pay and it would take less money away from men of wealth."

Whether the sense of fair play expressed in public opinion polls can be made to carry over into the field of legislative action is by no means certain. It is obvious, however, that the general public is hardly conscious of the gross inequities in the federal tax system, and that when the facts are put before them they exhibit a strong tendency to react favorably, as witness the public opinion surveys.

The problem here is therefore a matter of education. If given widespread publicity, the NAM five-year plan will serve as an admirable vehicle to reach this goal.

The Board of Directors has accordingly decided that, to the extent consistent with the Eisenhower program for a balanced budget and a modest start toward the reduction of the national debt, the Association should give active support and publicity to the NAM five-year plan to reduce federal income taxes to a top level of 35%. Everyone who shares the conviction that the present system of high and discriminatory taxes should be abolished before irreparable damage is done to our nation's economy is cordially invited to join in this worthwhile endeavor.

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Air Ducts
Wiremold Co The (Retractable) — Hartford

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Aircraft
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Consolidated Industries Inc — West Cheshire
Eastern Malleable Iron Company The — Naugatuck
Newton-New Haven Co 688 Third Avenue — West Haven
Charles Parker Company The — Meriden

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Bridgeport Brass Company — Bridgeport
Consolidated Industries Inc — West Cheshire
Scovill Manufacturing Company — Waterbury 91

Aluminum Ingots
Lapides Metals Corp — New Haven

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United Smelting & Aluminum Co Inc — New Haven

Ammunition
Arms and Ammunition Div Olin Mathieson Chemical Corp — New Haven
Remington Arms Co Inc and Peters Cartridge Div — Bridgeport

Anodizing
Comco Inc Div of Enthone Inc — New Haven
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Asbestos & Rubber Packing
Colt's Manufacturing Company — Hartford

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Assemblies—Small
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Greist Manufacturing Co The — New Haven
Humason Mfg Co The — Forestville
J H Sessions & Son — Bristol

Auto Cable Housing
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Automatic Control Instruments
Bristol Co The (temperature, pressure, flow, humidity, time) — Waterbury

Automatic Screw Machine Products
C K & B Machine Co Inc (Swiss) — Bethel

Automobile Accessories
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Automotive Bodies
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Automotive Parts
Eis Manufacturing Co (Hydraulic and Mechanical) — Middletown
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Automotive & Service Station Equipment
Scovill Manufacturing Company (Canned Oil Dispensers) — Waterbury 91

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Hartford Steel Ball Co The (steel bearing and burnishing, brass, bronze, monel, stainless aluminum) — Hartford
Kilian Steel Ball Corp The — Hartford

Banbury Mixers
Farrel-Birmingham Company Inc — Ansonia

Barrels
Abbott Ball Co The (burnishing and tumbling) — Hartford
Hartford-Steel Ball Co The (tumbling) — Hartford

Baskets—Wire
Rolock Inc — Fairfield

Bathroom Accessories
Autoyre Company The — Oakville
Charles Parker Co The — Meriden

Batteries
Electrical Div Olin Mathieson Chemical Corp (flashlight, radio, hearing aid and others) — New Haven

Bearings
Fafnir Bearing Co (ball) — New Britain
Marlin-Rockwell Corporation — Plainville
New Departure Div of General Motors (ball) — Bristol
Norma-Hoffmann Bearings Corp (ball and roller) — Stamford

Bellows
Bridgeport Thermostat Company Inc (metallic) — Bridgeport

Bellows Assemblies
Bridgeport Thermostat Company Inc — Bridgeport

Bellows Shaft Seal Assemblies
Bridgeport Thermostat Company Inc — Bridgeport

Bells
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Gong Bell Co The — East Hampton
N N Hill Brass Co The — East Hampton

Belt Fasteners
Saling Manufacturing Company (patented self-aligning) — Unionville

Belting
Hartford Belting Co — Hartford
Russell Mfg Co The — Middletown

Bends—Pipe or Tube
National Pipe Bending Co The — 160 River St New Haven

Bicycle Coaster Brakes
New Departure Div General Motors Corp — Bristol

Bicycle Sundries
New Departure Div General Motors Corp — Bristol

Binders Board
Colonial Board Company — Manchester

Blacking Salts for Metals
Enthone Inc — New Haven
Mitchell-Bradford Chemical Co — Bridgeport

Black Oxide Finishing
Black Oxide Inc — New Britain

Black Oxide Treatment
Bennett Metal Treating Co The 1045 New Britain Ave — Elmwood

Blades
Capewell Manufacturing Company Metal Saw Division (hack saw and band saw) — Hartford

Blocks
Howard Company (cupola fire clay) — New Haven

Blower Fans
Colonial Blower Company — Plainville
Spencer Turbine Co The — Hartford

(Advt.)

Blower Systems
Colonial Blower Company Plainville
Ripley Co Middletown

Blower Wheels
Torrington Manufacturing Company The Torrington

Blueprints and Photostats
Joseph Merritt & Co Hartford

Boilers
Bigelow Co The New Haven
General Electric Company (Residential oil and gas fired steam and hot water) Bridgeport

Bolts and Nuts
Blake & Johnson Co The (nuts machine screw-bolts, stove) Waterville
Clark Brothers Bolt Co Milldale

Bonderizing
Clairglow Mfg Company Portland

Box Board
Federal Paper Board Co Inc Montville, New Haven & Versailles
Lydall & Foulds Paper Co The Manchester
Robertson Paper Box Co Montville
Gair Company Inc Robert Montville
New Haven Board and Carton Co The New Haven

Boxes
Clairglow Mfg Company (metal) Portland
Connecticut Container Corporation New Haven
Gair Company Inc Robert (corrugated and solid fibre shipping containers) Portland
Merriam Mfg Co (steel cash, bond, security, fitted tool and tackle boxes) Durham
Warner Bros Co The (Acetate, Paper, Acetate and Paper Combinations, Counter Display, Setup) Bridgeport

Boxes and Crates
City Lumber Co of Bridgeport Inc The Bridgeport

Boxes—Folding
Leshine Carton Co Branford

Boxes—Metal
Merriam Mfg Co (Bond and Security, Cash and Utility, Personal Files and Drawer Safes) Durham
Scovill Manufacturing Company (aluminum, brass, bronze, copper-cosmetic, drug, hair pin, ointment, pill, powder, rouge, vanity) Waterbury

Boxes—Paper—Folding
Atlantic Carton Corp Norwich
Bridgeport Paper Box Co Bridgeport
Curtis & Sons Inc S Sandy Hook
Folding Cartons Incorporated (paper, folding) Versailles
Gair Company Inc Robert Montville
H J Mills Inc Bristol
National Folding Box Co Inc (paper folding) New Haven and Versailles
New Haven Board and Carton Co The New Haven
Robertson Paper Box Co Montville
Warner Bros Co The Bridgeport

Boxes—Paper—Setup
Box Shop Inc The New Haven
Bridgeport Paper Box Co. Bridgeport
Heminway Corporation The Waterbury
H J Mills Inc Bristol
Strouse Adler Company The New Haven
Warner Bros Co The Bridgeport

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Essex Mills Inc Essex

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Russell Mfg Co The Middletown

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American Brass Co The (sheet, wire, rods, tubes) Waterbury
Bridgeport Brass Company (sheet, rod, wire and tubing) Bridgeport
Bristol Brass Corp The (sheet, wire, rods) Bristol
Chase Brass & Copper Co Waterbury
Miller Company The (phosphor bronze and brass in sheets, strips, rolls) Meriden
Plume & Atwood Mfg Co The (sheet, wire, rod) Thomaston
Scovill Manufacturing Company Waterbury 91
Seymour Mfg Co The (strip, sheet & wire) Seymour
Tinsheet Metals Co The (sheets and rolls) Waterbury
Western Brass Mills Division of Olin Industries Inc (sheet, strip) New Haven

Brass & Bronze Ingot Metal
Mitchell Smelting & Refining Co Inc Botsford
Plume & Atwood Mfg Co The Thomaston
Whipple and Choate Company The Bridgeport

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Victors Brass Foundry Inc Guilford

Brass Goods
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Rostand Mfg Co The (Ecclesiastical Brass Wares) Milford
Scovill Manufacturing Company (to order) Waterbury 91
Western Brass Mills Div Olin Mathieson Chemical Corp New Haven

Brass Mill Products
American Brass Company The Waterbury
Bridgeport Brass Co Bridgeport
Chase Brass & Copper Co Waterbury
Plume & Atwood Mfg Co The Thomaston
Scovill Manufacturing Company Waterbury 91
Western Brass Mills Div Olin Mathieson Chemical Corp New Haven

Brick-Building
Donnelly Brick Co The New Britain

Bricks—Fire
Howard Company New Haven
Mullite Refractories Co The Shelton

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Fuller Brush Co The Hartford

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Patent Button Co The Waterbury
Risdon Manufacturing Co John M Russell Div Naugatuck

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Apothecaries Hall Co Waterbury
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Plume & Atwood Mfg Co The (kerosene oil lighting) Thomaston

Burners—Automatic
Peabody Engineering Corporation Stamford

Burners—Coal and Oil
Peabody Engineering Corporation (Combined) Stamford

Burners—Gas
Peabody Engineering Corporation (Blast Furnace) Stamford

Burners—Gas and Oil
Peabody Engineering Corporation (Combined) Stamford

Burners—Refinery
Peabody Engineering Corporation (For Gas and Oil) Stamford

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Buttons
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Patent Button Co The Waterbury
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Waterbury Companies Inc (Uniform and Fancy Dress) Waterbury

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Charles Parker Co The (medicine) Meriden

Cabinet Work
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Rockbestos Products Corp New Haven

Cable-Interlocked Armor
General Electric Company Bridgeport

Cable—Nonmetallic Sheathed
General Electric Company Bridgeport

Cable—Service Entrance
General Electric Company Bridgeport

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Cams
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Hartford Special Machinery Co The Hartford
Rowbottom Machine Company Inc Waterbury

Canvas Products
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Capacitors
Electro Motive Mfg Co Inc The (mica & trimmer) Willimantic

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Carbide Shape Dies
Thomaston Tool & Die Co (any form) Thomaston

Carbide Tools
Precision Tool & Die Co Waterbury

Card Clothing
Standard Card Clothing Co The (for textile mills) Stafford Springs

Carpenter's Tools
Sargent & Company (Planes, Squares, Plumb Bobs, Bench Screws, Clamps and Saw Vices) New Haven

Carpet
B F Goodrich Sponge Products Division Shelton

Carpet Cushion
B F Goodrich Sponge Products Division Shelton

Carpets and Rugs
Bigelow-Sanford Carpet Co Thompsonville

Casters
Bassick Company The (Industrial and General) Bridgeport

Casters—Industrial
George P Clark Co Windsor Locks

Castings
Connecticut Foundry Co (grey iron) Rocky Hill
Connecticut Malleable Castings Co (malleable iron castings) New Haven
Consolidated Industries Inc West Cheshire
Charles Parker Company The (brass, bronze, aluminum) Meriden
Ductile Iron Foundry Inc Stratford
Eastern Malleable Iron Company The (malleable iron, metal and alloy) Naugatuck
Farrel-Birmingham Company Inc (Meehanite, Nodular, Iron, Steel) Ansonia
Hartford Electric Steel Corp The (stainless steel) Hartford
Plainville Casting Company (gray, alloy and high tensile irons) Plainville
Malleable Iron Fittings Co (malleable iron and steel) Branford
McLagon Foundry Co (grey iron) New Haven
Newton-New Haven Co (zinc and aluminum) 688 Third Ave West Haven
Philbrick-Booth & Spencer Inc (grey iron) Hartford
Producto Machine Company The Bridgeport
Scovill Manufacturing Company (Brass & Bronze) Waterbury 91
Turner & Seymour Mfg Co The (gray iron, semi steel and alloy) Torrington
Union Mfg Co (grey iron & semi steel) New Britain
Waterbury Foundry Company The (highway & sash weights) Waterbury
Wilcox Crittenden & Co Inc (gray iron and brass) Middletown

(Advt.)

Castings—Investment
Arwood Precision Casting Corp — Groton

Cements—Refractory
Mullite Refractory Co The — Shelton

Centers
Ready Tool Co The (anti friction, carbide tipped, high speed) — Bridgeport

Chain
Risdon Manufacturing Co John M Russel Div — Naugatuck
Turner and Seymour Mfg Co The (weldless, sash, jack, safety, furnace, universal, lion and cable) — Torrington

Chain—Bead
Auto-Swage Products Inc — Shelton
Bead Chain Mfg Co The — Bridgeport

Chain—Power Transmission and Conveying
Whitney Chain Company — Hartford

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The Hitchcock Chair Company — Riverton

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Carwin Company The — North Haven

Chemicals
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Apothecaries Hall Co — Waterbury
Carwin Company The — North Haven
Macalaster Bicknell Company — New Haven
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New England Lime Company — Canaan
Pfizer & Co Inc Chas — Groton

Chemicals—Agriculture
Naugatuck Chemical Division United States Rubber Co (insecticides, fungicides, weed killers) — Naugatuck

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Foursome Manufacturing Co — Bristol

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Chromium Corp of America — Waterbury
Chromium Process Company The — Shelton
City Plating Works Inc — Bridgeport

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Horton Chuck Div The E Horton & Son Company — Windsor Locks
Jacobs Manufacturing Co The — West Hartford
Union Manufacturing Company — New Britain

Chucks—Drill
Jacobs Manufacturing Co The — West Hartford

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Cushman Chuck Co The — Hartford
Union Mfg Co — New Britain
Horton Chuck Div The E Horton & Son Company — Windsor Locks

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Seth Thomas Clocks — Thomaston
United States Time Corporation The — Waterbury

Clocks—Alarm
Lux Clock Mfg Co The — Waterbury

Clocks—Automatic Cooking
Lux Clock Mfg Co The — Waterbury

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Boesch Mfg Co Inc — Danbury

Coils
Dano Electric Company — Winsted

Coils—Electric
Bittermann Electric Company — Canaan

Coils—Pipe or Tube
National Pipe Bending Co The — 160 River St New Haven
Whitlock Manufacturing Co The — Hartford

Cold Molded Electrical Insulation
Meriden Molded Plastics — Meriden

Commercial Heat Treating
A F Holden Company The — 52 Richard St West Haven

Commercial Truck Bodies
Metropolitan Body Company — Bridgeport

Compacts
Scovill Manufacturing Company (powder and rouge) — Waterbury

Comparators
Pratt & Whitney Co Inc (Electro-limit and Air-O-Limit) — West Hartford

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Foy Electro-Chemical Co — Ansonia

Compressors
Norwalk Company Inc (high pressure air and gas) — South Norwalk

Computers
Newton Co The (electronic) — Manchester
Reflectone Corporation The — Stamford

Concrete Products
Plastricrete Corp — Hamden

Condenser and Heat Exchanger Tubes
Bridgeport Brass Company — Bridgeport
Scovill Manufacturing Company — Waterbury

Cones
Sonoco Products Co (Climax-Lowell Div) (Paper) — Mystic

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Pratt & Whitney Co Inc — West Hartford

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Malleable Iron Fittings Company — Branford
Charles Parker Co — Meriden

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Merriam Mfg Co (production runs—metal boxes and containers to specifications) — Durham
Charles Parker Co (sheet metal fabricators) — Meriden
Plume & Atwood Mfg Co The (metal parts and assemblies) — Thomaston
Scovill Manufacturing Company (metal parts and assemblies) — Waterbury 91
J H Sessions & Son — Bristol

Controllers
Bristol Company The — Waterbury
Manning Maxwell & Moore Inc — Stratford

Controls—Remote
Panish Controls (Remote Controls for Marine & Aeronautic Applications) — Bridgeport

Converters DC to AC
Electric Specialty Co — Stamford

Conveyor Systems
Leeds Conveyor Mfg Co The — East Haven
Production Equipment Co — Meriden

Copper
American Brass Corp The (sheet, wire, rods, tubes) — Waterbury
Bridgeport Brass Company (sheet, rod, wire and tubing) — Bridgeport
Bristol Brass Corp The (steel) — Bristol
Chase Brass & Copper Co (sheet, rod, wire tube) — Waterbury
Thinsheet Metals Co The (sheets and rolls) — Waterbury
Western Brass Mills Div Olin Mathieson Chemical Corp — New Haven

Copper Castings
Knapp Foundry Company Inc — Guilford

Copper Sheets
American Brass Company The — Waterbury
New Haven Copper Co The — Seymour

Copper Shingles
New Haven Copper Co The — Seymour

Copperware
Bridgeport Brass Company (cooking utensils) — Bridgeport

Copper Water Tube
American Brass Company The — Waterbury
Bridgeport Brass Co — Bridgeport

Cords—Asbestos Insulated
General Electric Company — Bridgeport

Cords—Braided
General Electric Company — Bridgeport

Cords—Heater
Essex Mills Inc — Essex
General Electric Company — Bridgeport

Cords—Portable
General Electric Company — Bridgeport

Cord Sets—Electric
General Electric Company — Bridgeport
Seeger-Williams Inc — Bridgeport

Cork Cots
Sonoco Products Co (Climax-Lowell Div) — Mystic

Corrugated Box Manufacturers
Connecticut Container Corporation — New Haven
Corrugated Containers Inc — Hartford

Corrugated Shipping Cases
Connecticut Container Corporation — New Haven
Connecticut Corrugated Box Div Robert Gair Co Inc — Portland
D L & D Container Corp 87 Shelton Ave — New Haven

Cosmetic Containers
Eyelet Specialty Co The — Waterbury
Plume & Atwood Mfg Co The (metal) — Thomaston
Scovill Manufacturing Company — Waterbury

Cosmetics
J B Williams Co The — Glastonbury

Cotton and Asbestos Wicking
Bland Burner Co The — Hartford

Cotton Yarn
Floyd Cranska Co The — Moosup

Counting Devices
Veeder-Root Inc — Hartford

Couplings
Scovill Manufacturing Company (hose and tube) — Waterbury

Couplings—Self-Sealing
Sperry Products Inc — Danbury

Cranes and Conveyors
J-B Engineering Sales Co — New Haven

Crushers
Farrel-Birmingham Company Inc (Stone and Ore) — Ansonia

Cups—Paper
Continental Can Co Paper Container Div — Kensington

Cushioning for Packaging
B F Goodrich Sponge Products Division — Shelton
Gilman Brothers Co The — Gilman

Cut Stone
Dextone Co The — New Haven

Cutters
Barnes Tool Company The (pipe cutters, hand) — New Haven
Mitrametric Co The (ground pinion) — Torrington
Pratt & Whitney Co Inc (Milling Cutters all types) — West Hartford

Cutting & Creasing Rule
Bartholomew Co H I — Bristol

Cyl. Gauges & Tools
J & S Machine Co Inc — Hartford

Deep Hole Drilling & Reaming
Hamden Deep Hole Drilling Co — Hamden
Wilson Arms Co The — Hartford (Advt.)

Deep Drawings
Stanley Pressed Metal — New Britain

Delayed Action Mechanism
M H Rhodes Inc — Hartford
R W Cramer Company Inc The — Centerbrook

Demineralizers
Crystal Research Laboratories — Hartford
Foy Electro-Chemical Co (industrial) — Ansonia

Development Work
Saybrook Manufacturing Inc — Old Saybrook

Diamonds—Industrial
Diamond Tool and Die Works — Hartford

Dictating Machines
Dictaphone Corporation — Bridgeport
Gray Manufacturing Company The — Hartford
SoundScriber Corporation The — New Haven

Die Cast Dies
C & F Tool & Die Corp — Bridgeport

Die Castings
Mt Vernon Die Casting Co — Stamford
Newton-New Haven Co Inc — New Haven

Die Casting Dies
ABA Tool & Die Co — Manchester
Eastern Machine Screw Corp The — Truman & Barclay Sts New Haven
Parker Stamp Works Co The — Hartford
Weimann Bros Mfg Co The — Derby

Die Heads—Self Opening
Eastern Machine Screw Corp The — New Haven
Geometric Tool Division, Greenfield Tap & Die Corp — New Haven

Die Polishing Machinery
Hartford Special Machinery Co The — Hartford

Die Sets
Pratt & Whitney Co Inc (Precision) — West Hartford
Producto Machine Company The — Bridgeport
Union Mfg Co (precision, steel and semi-steel) — New Britain

Die Sinkers
Pratt & Whitney Co Inc — West Hartford

Dies
Hoggson & Pettis Mfg Co The — 141 Brewery St New Haven
Mitrametric Co The (ground for gears) — Torrington
Parker Stamp Works Inc The (plastics and die castings) — Hartford
Pratt & Whitney Co Inc (Monocone and Ducone Dies) — West Hartford
Precision Engineering Co Inc (forging, trimming & blanking) — Southington

Dies & Die Cutting
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Dies and Die Sinking
Consolidated Industries — West Cheshire

Dish Drying Machines
Colt's Manufacturing Company — Hartford

Dish Washing Machines
Colt's Manufacturing Company — Hartford

Display Containers
National Folding Box Co Inc (folding paperboard) — New Haven and Versailles

Displays—Metal
Durham Mfg Co The (Designing & Mfg to customers' specifications) — Durham
Merriam Mfg Co (Contract Work to Individual Specifications) — Durham
Parsons Co Inc W A (custom designed)

Distribution Centers
Distribution Assemblies Department, General Electric Co — Plainville

Door Closers
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Doors
Bilco Co The (metal, residential and commercial) — West Haven

Dowel Pins
Allen Manufacturing Co The — Hartford
Holo-Krome Screw Corp The — West Hartford

Drafting Accessories
Joseph Merritt & Co — Hartford

Draft Inductors
Corley Co Inc The — Plainville

Drill Presses
Townsend Mfg Co The H P — Elmwood

Drilling Machines
Howe & Faut Inc (Turret Type) — East Norwalk
Pratt & Whitney Co Inc (Deep Hole) — West Hartford

Drilling and Tapping Mach'nery
Hartford Special Machinery Co The — Hartford

Drop Forgings
Atwater Mfg Co — Plantsville
Billings & Spencer Co The — Hartford
Consolidated Industries — West Cheshire
Wilcox Crittenden & Co Inc — Middletown

Druggists' Rubber Sundries
Seamless Rubber Company The — New Haven

Duplicating Machines—Automatic
Pratt & Whitney Co Inc — West Hartford

Duplicator Tables
Regent Machine Co — Bridgeport

Elastic Narrow Fabric
Essex Mills Inc — Essex

Electric Cables
General Electric Company (for residential, commercial and industrial applications) — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Clocks
Sessions Clock Co The (alarm, kitchen, occasional and office) — Forestville

Electric—Commutators & Segments
Cameron Elec Mfg Co The (rewinding motors) — Ansonia

Electric Cord Springs
Bristol Spring Manufacturing Co — Plainville

Electric Cords
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Eye Control
Ripley Company Inc — Middletown

Electric Fixture Wire
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Hand Irons
Winsted Hardware Mfg Co (trade mark "Durabilt") — Winsted

Electric Heating Elements
Hartford Element Co — Hartford

Electric Ignition Harnesses
General Electric Company — Bridgeport

Electric Insulation
Case Brothers Inc — Manchester
Stevens Paper Mills Inc The — Windsor

Electric Lighting Fixtures
Fan-Craft Mfg Co (residential, church, post lanterns) — Plainville
Plume & Atwood Mfg Co The — Thomaston
Wasley Products Inc — Plainville

Electric Motor Controls
Arrow-Hart & Hegeman Electric Co The — Hartford

Electrical Outlet and Switch Boxes, and Covers
General Electric Company — Bridgeport

Electric Signs
Berger Sign Co — Hartford
United Advertising Corp — New Haven

Electric Switches
Arrow-Hart & Hegeman Electric Co The — Hartford

Electric Time Controls
R W Cramer Company Inc The — Centerbrook

Electric Timers
Sessions Clock Co The — Forestville

Electric Timing Motors
Sessions Clock Co The (small) — Forestville

Electric Underfloor Duct System
General Electric Company — Bridgeport

Electric Wire
General Electric Company — Bridgeport
Rockbestos Products Corp (asbestos insulated) — New Haven

Electric Wiring Devices
Arrow-Hart & Hegeman Electric Co The — Hartford

Electric Woven Heating Elements
Pre-Fab Heating Co Inc — Guilford

Electrical Conduit Fittings & Grounding Specialties
Gillette-Vibber Company The — New London

Electrical Connectors
Burndy Engineering Co Inc — Norwalk

Electrical Control Apparatus
Plainville Electrical Products Co The — Plainville

Electrical Goods
A C Gilbert Co — New Haven

Electrical Motors
Electric Specialty Co — Stamford
U S Electrical Motors Inc — Milford

Electrical Recorders
Bristol Co The — Waterbury

Electrical Relays and Controls
Allied Control Co — Plantsville

Electrical Switchboards
Plainville Electrical Products Co The — Plainville

Electrical Test Equipment
McNeal J D — New Haven

Electrical Wiring Systems
Wiremold Co The — Hartford

Electronic Parts
Terryville Manufacturing Co (Stampings to customer specifications — Terryville

Electronics
Gray Manufacturing Company The — Hartford
McNeal J D — New Haven
Newton Co The — Manchester
Ripley Co — Middletown
Sturrup Larabee & Warmers Inc — Middletown

Electroplating
City Plating Works Inc — Bridgeport
National Sherardizing & Machine Co — Hartford
Waterbury Plating Company — Waterbury

Electroplating—Equipment & Supplies
Comco Inc Div of Enthone Inc — New Haven
Lea Manufacturing Co The — Waterbury
MacDermid Incorporated — Waterbury

Electroplating & Industrial Selenium Rectifiers
Foy Electro Chemical Co — Ansonia

Electroplating Processes & Supplies
Enthone Inc — New Haven
United Chromium Incorporated — Waterbury

Electrotypes
Barnum-Hayward Electrotype Co Inc — New Haven
Lockwood Sons Inc Wm H — Hartford
New Haven Electrotype Div Electrographic Corp — New Haven

Elevators
Eastern Machinery Co The (passenger and freight) — New Haven
General Elevator Service Co — Hartford

Enameling
Conn Metal Finishing Co — Hamden
Waterbury Plating Company — Waterbury

Enameling and Finishing
Clairglow Mfg Co — Portland

End Milling Cutters
Pratt & Whitney Co Inc — West Hartford

Engines
Pratt & Whitney Aircraft Div United Aircraft Corp (aircraft) — East Hartford
Wolverine Motor Works Inc (diesel stationary marine) — Bridgeport

Envelopes
Curtis 1000 Inc — Hartford
United States Envelope Company Hartford Division — Hartford (Advt.)

Envelopes—Stock and Special
Continental Can Co Paper Container Div Kensington

Extractors—Tap
Walton Company The West Hartford

Eyelets
American Brass Company The Waterbury
Platt Bros & Co The P O Box 1030 Waterbury
Plume & Atwood Mfg Co The Thomaston
Scovill Manufacturing Company Waterbury 91
Stevens Co Inc Waterbury

Eyelets, Ferrules and Wiring Terminals
American Brass Company The Waterbury

Eyelet Machine Products
American Brass Company The Waterbury
Ball & Socket Mfg Co The West Cheshire
Cold Forming Mfg Co The Waterbury
Plume & Atwood Mfg Co The Thomaston
Stevens Co Inc Waterbury

Fabricators
Scovill Manufacturing Company (aluminum, brass, bronze, copper, steel) Waterbury

Fan Blades
Torrington Manufacturing Company The Torrington

Fancy Dress Buttons and Buckles
Waterbury Companies Inc Waterbury

Fans—Electric
General Electric Company Bridgeport

Fasteners—Aircraft
Scovill Manufacturing Company (PANELOC Aircraft Fasteners) Waterbury

Fasteners—Laundry Proof
Scovill Manufacturing Company (GRIPPER snap fasteners) Waterbury

Fasteners—Slide & Snap
G E Prentice Mfg Co The Kensington
Scovill Manufacturing Company (GRIPPER zippers and GRIPPER snap fasteners) Waterbury

Felt
Auburn Manufacturing Company The (mechanical, cut parts) Middletown
Drycor Felt Company (paper makers and industrial) Staffordville

Felt—All Purpose
American Felt Co (Mill & Cutting Plant) Glenville
Chas W House & Sons Inc (Mills & Cutting Plant) Unionville

Fenders—Boat
B F Goodrich Sponge Products Division Shelton

Fiber-glass Fabrication
Davis Co The E J New Haven

Fibre Board
Case Brothers Inc Manchester
C H Norton Co The North Westchester
Stevens Paper Mills Inc The Windsor

File Cards
Standard Card Clothing Co The Stafford Springs

Films
Cine-Video Productions Inc Milford

Finger Nail Clippers
H C Cook Co The 32 Beaver St Ansonia

Firearms
Colt's Manufacturing Company Hartford
Junior Screw Machine Products Inc West Haven
Marlin Firearms Co The New Haven
O F Mosberg & Sons Inc New Haven
Remington Arms Company Inc Bridgeport
Arms and Ammunition Div Olin Mathieson Chemical Corp New Haven

Fire Hose
Fabrics Fire Hose (municipal and industrial) Sandy Hook

Fireplace Goods
American Windshield & Specialty Co The 881 Boston Post Road Milford
John P Smith Co The (screens) 423-33 Chapel St New Haven

Fireproof Floor Joists
Dextone Co The New Haven

Fireworks
M Backes' Sons Inc Wallingford

Fishing Lures
Dresser Products Inc Canaan

Fishing Tackle
H C Cook Co The 32 Beaver St Ansonia

Flashlights
Bridgeport Metal Goods Mfg Co Bridgeport
Electrical Div Olin Mathieson Chemical Corp New Haven

Flat Springs
Bristol Spring Manufacturing Co Plainville
Gemco Manufacturing Co Inc Southington

Flexible Shaft Machines
Pratt & Whitney Co Inc West Hartford

Floor & Ceiling Plates
Beaton & Cadwell Mfg Co The New Britain

Fluorescent Lighting Equipment
Fullerton Manufacturing Corp Norwalk
Vanderman Manufacturing Co The Willimantic
Wiremold Company The Hartford

Foam Rubber
B F Goodrich Sponge Products Division Shelton

Forgings
Billings & Spencer Company Hartford
Capewell Manufacturing Company Hartford
Cawthra Bros Forge Co Shelton
Clark Brothers Bolt Co Milldale
Consolidated Industries Inc West Cheshire
Heppenstall Co (all kinds and shapes) Bridgeport
Scovill Manufacturing Company (Non-ferrous) Waterbury 91

Foundries
Connecticut Malleable Castings Co (malleable iron castings) New Haven
Ductile Iron Foundry Inc Stratford
Farrel-Birmingham Company Inc (Iron and Steel) Ansonia
Fritzell Foundry & Casting Co The New Haven
Hartford Electric Steel Corp The Hartford
Charles Parker Company The (brass, bronze, aluminum) Meriden
Plainville Casting Company (gray, alloy and high tensile irons) Plainville
Producto Machine Company The Bridgeport
Turner & Seymour Mfg Co The (gray, iron, semi steel and alloy) Torrington
Union Mfg Co (gray iron & semi steel) New Britain
Wilcox Crittenden & Co Inc (iron, brass, aluminum and bronze) Middletown

Fountain Pens and Mechanical Pencils
Waterman Pen Company Inc Seymour

Foundry Riddles
John P Smith Co The 423-33 Chapel St New Haven

Fuel Oil Pump and Heater Sets
Peabody Engineering Corporation Stamford

Furnaces
Norwalk Airconditioning Corp The (warm air oil fired) South Norwalk

Gage Blocks
Pratt & Whitney Co Inc (Alloy steel and Carbide, Hoke and USA) West Hartford

Galvanizing
Malleable Iron Fittings Co Branford
Wilcox Crittenden & Co Inc Middletown

Gaskets
Auburn Manufacturing Company The (from all materials) Middletown
Raybestos Division of Raybestos-Manhattan Inc Bridgeport
Tsingris Die Cutting Corp (from all materials) Waterbury

Gas Range Conversion Burner
Holyoke Heater Corp of Conn Inc Hartford

Gas Scrubbers, Coolers and Absorbers
Peabody Engineering Corporation Stamford

Gauges
Bristol Co The (pressure and vacuum-recording automatic control) Waterbury
Helicoid Gage Division American Chain & Cable Co The (pressure and vacuum) Bridgeport
Manning Maxwell & Moore Inc Stratford
Pratt & Whitney Co Inc (Precision Measurement all types) West Hartford

Gears
Mitrametric Co The (blanked fine pitch) Torrington

Gears and Gear Cutting
Farrel-Birmingham Company Inc Ansonia
Fenn Mfg Co The Newington
Hartford Special Machinery Co The Hartford

Glass Blowing
Macalaster Bicknell Company New Haven

Glass Cutters
Fletcher-Terry Co The Forestville

Glass Machinery
Tavano Mfg Co Torrington

Gold & Silver Plating
Donham Craft Inc (on metals & plastics) Thomaston

Golf Equipment
Horton Mfg Co The (clubs, shafts, balls, bags) Bristol

Greeting Cards
A D Steinbach & Sons Inc New Haven

Grinding
Farrel-Birmingham Company Inc (Roll and Cylinderical) Ansonia
Hartford Special Machinery Co The (gears, threads, cams and splines) Hartford
Horberg Grinding Industries Inc (Precision custom grinding; centerless, cylindrical, surfaces, internal and special) 19 Staples St Bridgeport

Grinding Heads—Internal
Pratt & Whitney Co Inc (Pneumatic, High Speed) West Hartford

Grinding Machines
Farrel-Birmingham Company Inc (Roll) Ansonia
Pratt & Whitney Co Inc (Surface, Die, Gear and Cutter Grinders) West Hartford
Rowbottom Machine Company Inc (cam) Waterbury

Grommets
American Brass Company The Waterbury
Plume & Atwood Mfg Co The Waterbury

Ground Rubber Rolls
Saybrook Manufacturing Inc Old Saybrook

Guards for Machinery
Wheeler Co The G E New Haven

Hack and Band Saw Blades
Capewell Manufacturing Co The Hartford

Hammers—Carpenters and Machinests
Capewell Manufacturing Company Hartford

Hand Tools
Billings and Spencer Company (wrenches, sockets and shop tools) Hartford
Bridgeport Hdwe Mfg Corp The (nail pullers, scout axes, box opening tools, trowels, coping saws, putty knives) Bridgeport

Hardness Testers
Wilson Mechanical Instrument Div American Chain & Cable Company Inc Bridgeport

Hardware
Bassick Company The (Automotive) Bridgeport
Harlock Products Corp New Haven
Sargent & Company New Haven
Wilcox Crittenden & Co Inc (marine heavy and industrial) Middletown
Yale & Towne Mfg Co The Stamford

Hardware—Marine & Bus
Rostand Mfg Co The Milford

Hardware—Trailer Cabinet
Excelsior Hardware Co The Stamford

Hardware, Trunk & Luggage
Corbin Cabinet Lock Div American Hardware Corp New Britain
J H Sessions & Son Bristol
Yale & Towne Mfg Co The Stamford

Hat Machinery
Doran Bros Inc Danbury

Health Surgical & Orthopedic Supports
Berger Brothers Company The (custom made for back, breast, and abdomen) New Haven

Heat Elements
Electroflex Heat Inc Hartford
Safeway Heat Elements Inc (woven wire resistance type) Middletown

Heat Exchangers
Whitlock Manufacturing Co The Hartford

Heat Treating
A F Holden Co The 52 Richard St West Haven
Bennett Metal Treating Co The 1045 New Britain Ave Elmwood
Commercial Metal Treating Co Bridgeport
New Britain-Gridley Machine Division The New Britain Machine Co New Britain
Skene Co Inc The William A (metals) Bridgeport
Stanley P Rockwell Co Inc The 296 Homestead Ave Hartford

(Advt.)

Heat-Treating Equipment
Autoyre Company The — Oakville
Barnes Co The Wallace Div Associated Spring Corp — Bristol
A F Holden Company The 52 Richard Street — West Haven (Main Plant)
Bauer & Company Inc — Hartford
Rolock Inc (Retorts, Muffles, etc.) — Fairfield
Stanley P Rockwell Co Inc The (commercial) 296 Homestead Ave — Hartford

Heat Treating Fixtures
Rolock Inc (Trays, Baskets, etc.) — Fairfield
Wiretex Mfg Co Inc — Bridgeport

Heat Treating Salts and Compounds
A F Holden Company The 52 Richard Street — West Haven
Mitchell-Bradford Chemical Co — Bridgeport

Heaters—Electric
General Electric Company — Bridgeport

Heating and Cooling Coils
G & O Manufacturing Co — New Haven

Heating Elements
Hartford Element Co — Hartford

Heavy Chemicals
Naugatuck Chemical Division United States Rubber Co (sulphuric, nitric and muriatic acids and aniline oil)

Hex-Socket Screws
Bristol Company The — Waterbury
Holo-Krome Screw Corp The — West Hartford

High Frequency Alternators
Electric Specialty Co — Stamford

Highway Guard Rail Hardware
Malleable Iron Fittings Co — Branford

Hinges
Homer D Bronson Company — Beacon Falls

Hobs and Hobbings
ABA Tool & Die Co — Manchester
Parker Stamp Works Inc The — Hartford
Pratt & Whitney Co Inc (Die and Thread Milling) — West Hartford

Hoists
J-B Engineering Sales Co — New Haven

Hoists and Trolleys
Union Mfg Company — New Britain

Hose Fittings
Don Mfg Co J M — Naugatuck
Scovill Manufacturing Company — Waterbury

Hose—Flexible Metallic
American Brass Co American Metal Hose Branch — Waterbury

Hose Supporter Trimmings
Hawie Mfg Co The (So-Lo Grip Tabs) — Bridgeport

Hydraulic Brake Fluids
Eis Manufacturing Co — Middletown

Hydraulic Controls
Sperry Products Inc — Danbury

Hypodermic Needles
Roehr Products Company — Waterbury

Ice Buckets
B F Goodrich Sponge Products Division — Shelton

Inductors
C G S Laboratories Inc — Stamford

Industrial Chemicals
Foy Electro-Chemical Co — Ansonia

Industrial Chrome Plating
Mirror Polishing & Buffing Co — Waterbury

Industrial Displays
Sansone Co S Frederick (Designers Builders and Counselors) — Short Beach

Industrial Finishes
Chemical Coatings Corporation — Rocky Hill
United Chromium Incorporated — Waterbury

Industrial Tools—Powder Actuated
Remington Arms Company Inc — Bridgeport

Inks
Waterman Pen Company Inc — Seymour

Insecticides
American Cyanamid Company — Waterbury

Insulated Wire & Cable
Geneal Electric Company (for residential commercial and industrial applications) — Bridgeport
Kerite Company The — Seymour

Insulated Wire & Cable Machinery
Davis Electric Company — Wallingford

Instruments
Bristol Company The — Waterbury
J-B-T Instruments Inc (Electrical and Temperature) — New Haven
Manning Maxwell & Moore Inc — Stratford
Pratt & Whitney Co Inc (Precision Measuring) — West Hartford

Insulation
Gilman Brothers Co The — Gilman

Integrators
Reflectone Corporation The — Stamford

Interval Timers
Lux Clock Manufacturing Company — Waterbury
Rhodes Inc M H — Hartford

Jacquard
Case Brothers Inc — Manchester

Japanning
J H Sessions & Son — Bristol

Jig Borer
Moore Special Tool Co (Moore) — Bridgeport
Pratt & Whitney Co Inc — West Hartford

Jigs, Fixtures & Gages
Federal Machine & Tool Co — Bristol

Jig Grinder
Moore Special Tool Co (Moore) — Bridgeport

Keller Machines
Pratt & Whitney Co Inc — West Hartford

Key Blanks
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Labels
J & J Cash Inc (Woven) — South Norwalk
Naugatuck Chemical Division United States Rubber Co (for rubber articles) — Naugatuck

Label Moisteners
Better Packages Inc — Shelton

Laboratory Equipment
Eastern Industries Inc — New Haven

Laboratory Supplies
Macalaster Bicknell Company — New Haven

Laces
American Fabrics Company The — Bridgeport
Wilcox Lace Corporation — Middletown

Laces and Nettings
Wilcox Lace Corporation The — Middletown

Lacquers & Synthetic Enamels
Chemical Coatings Corporation — Rocky Hill
I-Sis Chemicals Inc — Stamford
United Chromium Incorporated — Waterbury

Ladders
A W Flint Co — 196 Chapel St New Haven

Laminated Metal
Bridgeport Brass Company — Bridgeport

Lamps
Plume & Atwood Mfg Co The (metal oil) — Waterbury

Lampholders—Incandescent and Fluorescent
General Electric Company — Bridgeport

Lamp Shades
Verplex Company The — Essex

Lanterns—Battery Operated
Electrical Div Olin Mathieson Chemical Corp — New Haven

Lathes—Contin-U-Matic
Bullard Company, The (vertical multi-spindle-continuous turning type) — Bridgeport

Lathes—Man-Au-Trol
Bullard Company The — Bridgeport

Lathes—Mult-Au-Matic
Bullard Company The (vertical multi-spindle-indexing type) — Bridgeport

Lathes—Toolroom and Automatic
Pratt & Whitney Co Inc — West Hartford

Lathes—Vertical Turret
Bullard Company The (single spindle) — Bridgeport

Lead Plating
Christie Plating Co The — Groton

Leather
Norwich Leather Co — Norwich
Herman Roser & Sons Inc (Genuine Pigskin) — Glastonbury

Leather Dog Furnishings
Andrew B Hendryx Co The — New Haven
The Smith-Worthington Saddlery Co — Hartford

Leather Goods Trimmings
G E Prentice Mfg Co The — Kensington

Leather, Mechanical
Auburn Manufacturing Company The (packings, cubs, washers, etc) — Middletown

Letterheads
Lehman Brothers Inc (designers, engravers, lithographers) — New Haven

Levels—Machinist's Precision
Bullard Company The — Bridgeport

Light Assemblies
Saybrook Manufacturing Inc — Old Saybrook

Lighting Accessories—Fluorescent
General Electric Company — Bridgeport

Lighting Equipment
Fullerton Manufacturing Corp — Norwalk
Miller Co The (Miller, Duplexalite, Ivanhoe) — Meriden

Lines—Braided
Essex Mills Inc — Essex

Lime
New England Lime Company — Canaan

Lipstick Cases
Scovill Manufacturing Company — Waterbury

Lipstick Containers
Bridgeport Metal Goods Mfg Co — Bridgeport
Plume & Atwood Manufacturing Co — Waterbury

Lithographers
O'Toole & Sons Inc T — Stamford

Lithographing
Kellogg & Bulkeley A Division of Connecticut Printers Inc — Hartford
Lehman Brothers Inc — New Haven
A D Steinbach & Sons — New Haven

Locks—Banks
Yale & Towne Mfg Co The — Stamford

Locks—Builders
Eagle Lock Co The — Terryville
Sargent & Company — New Haven
Yale & Towne Mfg Co The — Stamford

Locks—Cabinet
Eagle Lock Co The — Terryville
Excelsior Hardware Co The — Stamford
Yale & Towne Mfg Co The — Stamford

Locks—Special Purpose
Eagle Lock Co The — Terryville
Yale & Towne Mfg Co The — Stamford

Locks—Suitcase
Eagle Lock Co The — Terryville

Locks—Suitcase and Trimmings
Excelsior Hardware Co The — Stamford

Locks—Trunk
Eagle Lock Co The — Terryville
Excelsior Hardware Co The — Stamford
Yale & Towne Mfg Co The — Stamford

Locks—Zipper
Excelsior Hardware Co The — Stamford

Loom—Non-Metallic
Wiremold Company The — Hartford

Lumber & Millwork Products
City Lumber Co of Bridgeport Inc — Bridgeport

Machetes
Collins Company The — Collinsville

Lubricants—High Pressure
Alpha Molykote Corp The — Stamford

Lubricants—Extreme Temperatures
Alpha Molykote Corp The — Stamford (Advt.)

Machine Design
Black Rock Mfg Company The Bridgeport

Machine Tool Designers
R & S Company New Britain

Machine Tools
Bullard Company The Bridgeport
Pratt & Whitney Co Inc West Hartford
Producto Machine Company The Bridgeport

Machine Work
Black Rock Mfg Company The Bridgeport
Farrel-Birmingham Company Inc Ansonia
Fenn Manufacturing Company The (precision parts) Newington
Hartford Special Machinery Co The (contract work only) Hartford
National Sheradizing & Machine Co (job) Hartford
Parker Stamp Works Inc The (Special) Hartford
Swan Tool & Machine Co The Hartford
Torrington Manufacturing Co The (special rolling mill machinery) Torrington

Machinery
Fenn Manufacturing Company The (special) Newington
Globe Tapping Machine Company (dial type drilling and tapping) Bridgeport
Hallden Machine Company The (mill) Thomaston
Torrington Manufacturing Co The (mill) Torrington

Machinery—Automatic
Banthin Engineering Company (new and rebuilt) Bridgeport

Machinery—Bolt and Nut
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Cold Heading
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery Dealers & Rebuilders
Botwinik Brothers New Haven
J L Lucas and Son Fairfield
State Machinery Co Inc New Haven

Machinery—Extruding
Standard Machinery Co The Mystic

Machinery—Metal-Working
Fenn Mfg Co The Newington
Waterbury Farrel Foundry & Machine Co The Waterbury
Pratt & Whitney Co Inc West Hartford

Machinery—Nut
Waterbury Farrel Foundry & Machine Co The (forming and tapping) Waterbury

Machinery—Screw and Rivet
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Wire Drawing
Fenn Mfg Co The Newington
Waterbury Farrel Foundry & Machine Co The Waterbury

Machinery—Wire Straightening
Mettler Machine Tool Inc New Haven

Machines
Campbell Machine Div American Chain & Cable Co Inc (cutting & nibbling) Bridgeport
Coulter & McKenzie Machine Co The (special, new development engineering design and construction) Bridgeport
Patent Button Company The Waterbury

Machines—Automatic
A H Nilson Mach Co The (Special) Bridgeport

Machines—Automatic Chucking
Bullard Company The Bridgeport
New Britain-Gridley Machine Division The New Britain Machine Co (multiple spindle and double end) New Britain
Pratt & Whitney Co Inc (Potter & Johnson) West Hartford

Machines—Brushing
Fuller Brush Co The Hartford

Machines—Contin-U-Matic
Bullard Company The (verticle multi-spindle—continuous turning) Bridgeport

Machines—Draw Benches
Fenn Manufacturing Company The Newington

Machines—Forming
A H Nilson Mach Co The (four-slide wire and ribbon stock) Bridgeport

Machines—Paper Ruling
John McAdams & Sons Inc Norwalk

Machines—Pipe & Bolt Threading
Capewell Mfg Co The Hartford

Machines—Precision Boring
New Britain-Gridley Machine Division The New Britain Machine Co New Britain

Machines—Rolling
Fenn Manufacturing Company The Newington

Machines—Slotting
Globe Tapping Machine Company The (High Production Screw Head Slotting) Bridgeport
Waterbury Farrel Foundry & Machine Co The (screw head) Waterbury

Machines—Spacing Table
Bullard Company The Bridgeport

Machines—Special
Fenn Mfg Co The Newington
Fuller Brush Co The Hartford

Machines—Swaging
Fenn Manufacturing Company The Newington

Machines—Thread Rolling
Hartford Special Machinery Co The Hartford
Waterbury Farrel Foundry & Machine Co The Waterbury

Machines—Turks Head
Fenn Manufacturing Company The Newington

Machines—Well Drilling
Consolidated Industries West Cheshire

Machines—Wire Drawing
Fenn Manufacturing Company The Newington

Magnet Wire
Viking Wire Co Inc Danbury

Manganese Bronze Ingot
Whipple and Choate Company Bridgeport

Manicure Instruments
W E Bassett Company The Derby

Marine Engines
Kilborn-Sauer Company (running lights and searchlights) Fairfield
Lathrop Engine Co The Mystic

Marine Equipment
Russell Manufacturing Company The (utility cord and accessory hardware) Middletown
Wilcox-Crittenden Div North & Judd Mfg Co Middletown

Marine Reserve Gears
Snow-Nabstedt Gear Corp The New Haven

Marking Devises
Hoggson & Pettis Mfg Co The New Haven
Parker Stamp Works Inc The (steel) Hartford

Material Handling
Parsons Co Inc W A (tote pans) Durham

Mats—Newspaper
Lockwood Sons Inc Wm H Hartford

Mattresses
Waterbury Mattress Co Waterbury

Metal Boxes
Parsons Co Inc W A (tool kits) Durham

Metal Boxes and Displays
Durham Mfg Co The (Designing & Mfg to customers specifications) Durham
Merriam Mfg Co (Bond, Security, Cash, Utility, Personal Files, Drawer Safes, Custombilt containers and displays) Durham
Charles Parker Co (sheet metal fabricators) Meriden

Metal Cleaners
Apothecaries Hall Co Waterbury
Enthone Inc New Haven
Foy Electro-Chemical Co Ansonia
MacDermid Incorporated Waterbury

Metal Cleaning Machines
Colt's Manufacturing Company Hartford

Metal Finishes
Enthone Inc New Haven
Mitchell-Bradford Chemical Co Bridgeport
United Chromium Incorporated Waterbury

Metal Finishing
Hartford Industrial Finishing Co Hartford
National Sheradizing & Machine Co Hartford
Waterbury Plating Company Waterbury

Metal Formings
Master Engineering Company West Cheshire
Stanley Pressed Metal New Britain

Metal Mouldings
Leed Co The H A Hamden

Metalizing
Conn Metal Finishing Co Hamden

Metal Novelties
H C Cook Co The 32 Beaver St Ansonia

Metal Parts Washing Machines
Foy Electro-Chemical Co Ansonia

Metal Plating—Gold & Silver
Donham Craft Inc Thomaston

Metal Products—Stampings
American Brass Company The Waterbury
Plume & Atwood Manufacturing Co Thomaston
J H Sessions & Son Bristol
Scovill Manufacturing Company (Made-to-Order) Waterbury 91
Stanley Pressed Metal New Britain

Metal Specialties
Excelsior Hardware Co The Stamford

Metal Spinning
Moseley Metal Crafts Inc West Hartford

Metal Stampings
American Brass Company The Waterbury
Autoyre Co The (Small) Oakville
Better Formed Metals Inc Waterbury
DooVal Tool & Mfg Inc The Naugatuck
Excelsior Hardware Co The Stamford
Greist Mfg Co The 503 Blake St New Haven
H C Cook Co The 32 Beaver St Ansonia
Humason Mfg Co The Forestville
Mohawk Mfg Co (threaded) Middletown
J A Otterbein Company The (metal fabrications) Middletown
J H Sessions & Son Bristol
Patent Button Co The Waterbury
G E Prentice Mfg Co The Kensington
Plume & Atwood Mfg Co The Thomaston
Saling Manufacturing Company Unionville
Stanley Pressed Metal New Britain
Swan Tool & Machine Co The Hartford
Terryville Manufacturing Co Terryville
Verplex Company The (Contract) Essex
Waterbury Lock & Specialty Co The Milford

Meters
Standard Meter Repair Co The Shelton

Meters—Gas
Sprague Meter Company Bridgeport

Meters—Parking
Rhodes Inc M H Hartford

Microfilming
American Microfilming Service Company New Haven

Milk Bottle Carriers
John P Smith Co The 423-33 Chapel St New Haven

Mill Machinery
Torrington Manufacturing Company The Torrington

Milling Machines
Pratt & Whitney Co Inc (Keller Tracer—Controlled Milling Machines) West Hartford
Rowbottom Machine Company Inc (cam) Waterbury

Mill Products
Scovill Manufacturing Company (aluminum, brass, bronze, nickel silver—sheet, rod, wire, tube) Waterbury

Mill Supplies
Wilcox-Crittenden Div North & Judd Mfg Co Middletown

Millwork
Hartford Builders Finish Co Hartford

Miniature Precision Connectors
Gora Electric Co Stamford

Minute Minders
Lux Clock Mfg Co The Waterbury

Mirror Rosettes and Hangers
Waterbury Companies Inc Waterbury

Mixing Equipment
Eastern Industries Inc New Haven
Gabb Special Products Div The E Horton & Son Co Windsor Locks

(Advt.)

Model Work
B & N Tool & Engineering Co (instruments and timing devices) Oakville

Mops
Fuller Brush Co The Hartford

Motor Control Centers
Distribution Assemblies Department, General Electric Co Plainville

Motor—Generator Sets
Electric Specialty Co Stamford

Motors—Electric Timing
Cramer Co Inc The R W Centerbrook

Motors—Synchronous
Cramer Co Inc The R W Centerbrook
Electric Specialty Co Stamford

Moulded Plastic Products
Butterfield Inc T F Naugatuck
Colt's Manufacturing Company Hartford
Patent Button Co The Waterbury
Waterbury Companies Inc Waterbury
Watertown Mfg Co The 117 Echo Lake Road Watertown

Mouldings
Himmel Brothers Co The (architectural, metal and store front) Hamden

Moulds
ABA Tool & Die Co Manchester
Hoggson & Pettis Mfg Co The (steel) 114 Brewery St New Haven
Parker Stamp Works Inc The (compression injection & transfer for plastics) Hartford

Napper Clothing
Standard Card Clothing Co The (for textile mills) Stafford Springs

Nettings
Wilcox Lace Corp The Middletown

Newspaper Mats
Lockwood Sons Inc Wm H Hartford

Nickel Anodes
Apothecaries Hall Co Waterbury

Nickel Silver
American Brass Company The Waterbury
Bridgeport Brass Company Bridgeport
Plume & Atwood Mfg Co The Thomaston
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury
Western Brass Mills Div Olin Mathieson Chemical Corp (sheet, strip) New Haven

Nickel Silver Ingot
Whipple and Choate Company The Bridgeport

Night Latches
Sargent & Company New Haven
Yale & Towne Mfg Co Inc Stamford

Non-ferrous Metal Castings
Miller Company The Meriden
Charles Parker Co Meriden

Nuts, Bolts and Washers
Clark Brothers Bolt Co Milldale

Office Equipment
Pitney-Bowes Inc Stamford
Underwood Corporation Bridgeport & Hartford

Offset Printing
Kellogg & Bulkeley A Division of Connecticut Printers Inc Hartford

Oil Burners
Miller Company The (domestic) Meriden
Peabody Engineering Corp (Mechanical and/or Steam Atomizer) Stamford
Silent Glow Oil Burner Corp The 1477 Park St Hartford

Oil Tanks
Norwalk Tank Co The (550 to 30M gals, underwriters above and under ground) South Norwalk
Whitlock Manufacturing Co The Hartford

Oils—Cutting
Anderson Oil Co Inc F E Portland

Open Knife Switches and Accessories
Trumbull Components Department, General Electric Co Plainville

Optical Cores & Ingots
Plume & Atwood Mfg Co The Thomaston

Otis Woven Awning Stripes
The Falls Company Norwich

Ovens—Electric
Bauer & Company Inc Hartford

Overhead Garage Doors
Wallingford Planing Mill Co Inc Yalesville

Package Sealers
Better Packages Inc Shelton

Packaging Machinery
Colt's Manufacturing Company (box making machinery, Trade mark "Rite Size") Hartford

Packaging & Packing
Mercer & Stewart Co The Hartford

Packing
Auburn Manufacturing Company The (leather, rubber, asbestos, fibre) Middletown
Raybestos Division of Raybestos-Manhattan Inc (Asbestos and Rubber Sheet) Bridgeport

Padlocks
Sargent & Company New Haven
Waterbury Lock & Specialty Co The Milford
Yale & Towne Mfg Co Inc Stamford

Pads—Office
The Baker Goodyear Company New Haven

Paints and Enamels
Staminate Corp The New Haven

Panelboards—Lighting and Distribution
Distribution Assemblies Department, General Electric Co Plainville

Panelyte
Leed Co The H A Hamden

Panta
Moore Special Tool Co (crush wheel dresser) Bridgeport

Paperboard
Federal Paper Board Co Inc Montville, New Haven & Versailles
Gair Company Inc Robert Montville
Robertson Paper Box Co Montville
New Haven Pulp and Board Co The New Haven

Paper Box—Partitions
American Rondo Corporation (specialty partitions) Hamden

Paper Boxes
Atlantic Carton Corp (folding) Norwich
National Folding Box Co Inc (folding) New Haven & Versaille
New Haven Board and Carton Co The New Haven
Mills Inc H J Bristol
Robertson Paper Box Co (folding) Montville

Paper Boxes—Folding and Setup
Bridgeport Paper Box Company Bridgeport
M Backes' Sons Inc Wallingford

Paper Clips
H C Cook Co The (steel) 32 Beaver St Ansonia

Paper Mill Machinery
Farrel-Birmingham Company Inc Ansonia

Paper Tubes and Cores
Sonoco Products Co (Climax-Lowell) Div Mystic

Parachute Cord
Essex Mills Inc Essex

Parallel Tubes
Sonoco Products Co (Climax-Lowell) Div Mystic

Parkerizing
Clairglow Mfg Company Portland

Parking Meters
Rhodes Inc M H Hartford

Parts
Scovill Manufacturing Company (ammunition, electric instrument, electrical appliance, fountain pen, instrument, lighting fixture, ordance, etc.—blanked, stamped, formed, drawn, re-drawn, forged, screw machined, headed, pointed, finished) Waterbury

Passenger Car Sander
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Pattern-Makers
Farrel-Birmingham Company Inc Ansonia

Penlights
Bridgeport Metal Goods Mfg Co Bridgeport

Pet Furnishings
Andrew B Hendrix Co The New Haven

Phosphor Bronze
American Brass Company The Waterbury
Bridgeport Brass Company Bridgeport
Miller Company The (sheets, strips, rolls) Meriden
Seymour Mfg Co The Seymour
Waterbury Rolling Mills Inc (sheets, strips, rolls) Waterbury
Western Brass Mills Div Olin Mathieson Chemical Corp (sheet, strip) New Haven

Phosphor Bronze Ingots
Whipple and Choate Company The Bridgeport

Photoflash Batteries
Electrical Div Olin Mathieson Chemical Corp New Haven

Photographic Equipment
Electrical Div Olin Mathieson Chemical Corp New Haven
Kalart Company Inc Plainville

Piano Repairs
Pratt Read & Co Inc (keys and action) Ivoryton

Piano Supplies
Pratt Read & Co (keys and actions, backs, plates) Ivoryton

Pins
CEM Company ("Spirol") Danielson

Pin Up Lamps
Verplex Company The Essex

Pipe
American Brass Co The (brass and copper) Waterbury
Bridgeport Brass Co (brass and Copper) Bridgeport
Chase Brass & Copper Co (red brass and copper) Waterbury
Howard Co (cement well and chimney) New Haven

Pipe Fitters Hand Tools & Pipe Threading Machines
Capewell Manufacturing Company Hartford

Pipe Fittings
Corley Co Inc Plainville
Malleable Iron Fittings Co Branford

Pipe Plugs
Holo-Krome Screw Corporation The (countersunk) West Hartford

Pipe Plugs—Socketed
Holo-Krome Screw Corp The West Hartford

Plastic Coatings
Bischoff Chemical Corporation (Peelable Plastic Coatings) Ivoryton

Plastic Buttons
Frank Parizek Manufacturing Co The West Willington
Patent Button Co The Waterbury

Plastic Gems
Colt's Manufacturing Company Hartford

Plastic Lining Equipment
Comco Inc Div of Enthone Inc New Haven

Plastic Materials
American Cyanamid Co (Molding Compounds, Adhesives, Laminating Resins) Wallingford

Plastic Pipe and Fittings
Comco Inc Div of Enthone Inc New Haven

Plastic Molders
Plastic Molding Corporation Sandy Hook

Plastic Molding
Butterfield Inc T F Naugatuck
U S Plastic Molding Corporation Wallingford

Plastic—Moulders
Colt's Manufacturing Company Hartford
Conn Plastics Waterbury
Waterbury Companies Inc Waterbury
Watertown Mfg Co The Watertown

Plastic Printing Plates
Lockwood Sons Inc Wm H Hartford

Plastic Wire Coating Materials
Electronic Rubber Co Stamford

Plastics
B F Goodrich Sponge Products Division Shelton
Humphrey Fabricating Corp (laminated, fabricated parts) Unionville
Naugatuck Chemical Division Unitel States Rubber Co Naugatuck

(Advt.)

Plastics Machinery
Black Rock Mfg Company The — Bridgeport
Farrel-Birmingham Company Inc — Ansonia

Plastics Plated—Gold & Silver
Donham Craft Inc — Thomaston

Plastics—Moulds & Dies
Crown Tool & Die Co Inc — Bridgeport
Parker Stamp Works Inc The (for plastics) — Hartford

Plasticrete Bloc
Plasticrete Corp — Hamden

Platers
Acme Chromium Plating Co — New Haven
Christie Plating Co — Groton
City Plating Works — Bridgeport
Patent Button Co The — Waterbury
Water Plating Company — Waterbury
Chromium Process Company The (Chromium Plating only) — Derby

Platers' Equipment
Apothecaries Hall Company — Waterbury
Comco Inc Div of Enthone Inc — New Haven
Foy Electro-Chemical Co — Ansonia
Lea Manufacturing Co The — Waterbury
MacDermid Incorporated — Waterbury

Platers Metal
Plume & Atwood Mfg Co The — Thomaston

Plating
Christie Plating Co The (including lead plating) — Groton
City Plating Works Inc — Bridgeport
Conn Metal Finishing Co — Hamden
Superior Plating Co — Bridgeport

Plating on Metals & Plastics
Donham Craft Inc — Thomaston

Plating Processes and Supplies
Enthone Inc — New Haven
United Chromium Incorporated — Waterbury

Plumbers' Brass Goods
Bridgeport Brass Co — Bridgeport
Keeney Mfg Co The (special bends) — Newington
Scovill Manufacturing Company — Waterbury 48

Plumbing Specialties
Risdon Manufacturing Co John M Russell Div — Naugatuck

Pneumatic Machinery
Bourne Tool & Die Co (built, designed & tooled) — Watertown

Pole Line Hardware
Malleable Iron Fittings Co — Branford

Police Equipment
The Smith-Worthington Saddlery Co — Hartford

Polishing
Mirror Polishing & Buffing Co — Waterbury

Polishing & Buffing
General Polishing & Buffing — Bridgeport

Poly Chokes
Poly Choke Company The (a shotgun choking device) — Tarriffville

Postage Meters
Pitney Bowes Inc — Stamford

Potentiometers—Electronic
Bristol Company The — Waterbury

Power Rollers
Consolidated Industries Inc — West Cheshire

Precision Electronic Chassis
Saybrook Manufacturing Inc — Old Saybrook

Precision Machine Tool Spindles
Whitnon Manufacturing Co (for milling, grinding, boring & drilling) — Farmington

Precision Manufacturing
Newton Co The (aircraft parts) — Manchester

Precision Revolving Machinery
Whitnon Manufacturing Co — Farmington

Precision Springs & Wire Forms
Rowley Spring Co Inc The — Bristol

Prefabricated Buildings
City Lumber of Bridgeport Inc The — Bridgeport

Premium Specialties
Waterbury Companies Inc — Waterbury

Preservatives—Wood, Rope, Fabric
Darworth Incorporated ("Cuprinol") ("Cellu-san") — Simsbury

Press Papers
Case Brothers Inc — Manchester

Presses
Farrel-Birmingham Company Inc (Hydraulic) — Ansonia

Presses—Molding
Standard Machinery Co The (compression and transfer molding, automatic and semi-automatic) — Mystic

Presses—Power
Pneumatic Applications Co The (modernization of presses through conversion to Wichita Air Clutch operation) — Simsbury
Waterbury Farrel Foundry & Machine Co The — Waterbury

Pressure Vessels
Norwalk Tank Co Inc The (unfired to ASME Code Par U 69-70) — South Norwalk
Whitlock Manufacturing Co The — Hartford

Printing
Bussmann Press Inc — New Haven
Case Lockwood & Brainard A Division of Connecticut Printers Inc — Hartford
Finlay Brothers — Hartford
Heminway Corporation The — Waterbury
Hildreth Press — Bristol
Hunter Press — Hartford
Lehman Brothers Inc — New Haven
Taylor & Greenough Co The — Wethersfield
T B Simonds Inc — Hartford
A D Steinbach & Sons — New Haven
The Walker-Rackliff Company — New Haven

Printing Machinery
Banthin Engineering Co (automatic) — Bridgeport
Thomas W Hall Company — Stamford

Printing Plates
Lockwood Sons Inc Wm H — Hartford

Printing Rollers
Chambers-Storck Company Inc The (engraved) — Norwich

Production Control Equipment
Ripley Company Inc — Middletown

Production Welding
Consolidated Industries — West Cheshire

Profilers
Pratt & Whitney Co Inc — West Hartford

Propellers—Aircraft
Hamilton Standard Div United Aircraft Corp (propellers and other aircraft equipment) — Windsor Locks

Protective Coatings
Bischoff Chemical Corporation (Peelable Plastic Coatings) — Ivoryton
Harrison Company The A S (Waxes) — South Norwalk

Publishers
O'Toole & Sons Inc The — Stamford

Pumps
Yale & Towne Mfg Co The — Stamford

Pumps—Small Industrial
Eastern Industries Inc — New Haven

Pump Valves
Colt's Manufacturing Company — Hartford

Punches
Hoggson & Pettis Mfg Co The (ticket & cloth) 141 Brewery St — New Haven

Putty Softeners—Electrical
Fletcher Terry Co The — Box 415 Forestville

Pyrometers
Bristol Co The (recording and controlling) — Waterbury

Radiation—Finned Copper
Bush Manufacturing Co — West Hartford
G & O Manufacturing Company The — New Haven
Vulcan Radiator Co The (steel and copper) — Hartford

Radiators—Engine Cooling
G & O Manufacturing Co — New Haven

Ratchet Offset Screw Driver
Chapman Co J W — Durham

Rayon Staple Fiber
Hartford Rayon Corp The — Rocky Hill

Reamers
Pratt & Whitney Co Inc (All types) — West Hartford

Recorders
Bristol Co The (automatic controllers, temperature, pressure, flow, humidty) — Waterbury

Reduction Gears
Farrel-Birmingham Company Inc — Ansonia
Snow-Nabstedt Gear Corp The — New Haven

Refractories
Howard Company — New Haven
Mullite Refractories Company The — Shelton

Refrigeration
Bowser Technical Refrigeration Div Bowser Inc (high altitude, low temperature) — Terryville
Bush Manufacturing Co The — West Hartford

Regulators
Norwalk Valve Company (for gas and air) — South Norwalk
Sorensen & Company Inc — Stamford

Research & Development
Raymond Engineering Laboratories (Electro-Mechanical) — Middletown

Resistance Wire
C O Jeliff Mfg Co The (nickel chromium, copper nickel, iron chromium, aluminum) — Southport
Kanthal Corporation The — Stamford

Respirators
American Optical Company Safety Products Division — Putnam

Retainers
Hartford Steel Ball Co The (bicycle & automotive) — Hartford

Riveting Machines
Grant Mfg & Machine Co The — Bridgeport
Ripley Company Inc — Middletown
H P Townsend Manufacturing Co The — Elmwood

Rivets
Blake & Johnson Co The (brass, copper and non-ferrous) — Waterville
Clark Brothers Bolt Co — Milldale
Plume & Atwood Mfg Co The — Thomaston
Raybestos Div of Raybestos-Manhattan Inc The (brass and aluminum tubular and solid copper) — Bridgeport
Raybestos Div of Raybestos-Manhattan Inc The (iron) — Bridgeport

Rods
American Brass Company The (copper, brass, bronze) — Waterbury
Bridgeport Brass Company — Bridgeport
Bristol Brass Corp The (brass and bronze) — Bristol
Scovill Manufacturing Company (aluminum, brass, bronze, etc.) — Waterbury

Rollers—Bituminous Paving
Gabb Special Products Div E Horton & Son Company — Windsor Locks

Roller Skate Wheels
Raybestos Division of Raybestos-Manhattan Inc — Bridgeport

Roller Skates
Arms and Ammunition Div Olin Mathieson Chemical Corp — New Haven

Rolling Mills & Equipment
Farrel-Birmingham Company Inc — Ansonia
Fenn Mfg Co The — Newington
Precision Methods & Machines Inc — Waterbury
Waterbury Farrel Foundry & Machine Co The — Waterbury

Rolls
Farrel-Birmingham Company Inc (Chilled and Alloy Iron, Steel) — Ansonia

Rope Wire
American Steel & Wire Div of U S Steel — New Haven

Rubber—Cellular
B F Goodrich Sponge Products Division — Shelton

Rubber Chemicals
Naugatuck Chemical Division United States Rubber Co — Naugatuck
Stamford Rubber Supply Co The ("Factice" Vulcanized Vegetable Oils) — Stamford

Rubber Cutting Machinery
Black Rock Mfg Company The — Bridgeport

Rubberized Fabrics
Duro-Gloss Rubber Co The — New Haven

Rubber Footwear
Goodyear Rubber Co The — Middletown

Rubber Gloves
Seamless Rubber Company The — New Haven (Advt.)

Rubber—Handmade Specialties
Seamless Rubber Company The New Haven

Rubber Latex Compounds and Dispersions
Naugatuck Chemical Division United States Rubber Co (coating, impregnating and adhesive compounds) Naugatuck

Rubber—Latex Foam
B F Goodrich Sponge Products Division Shelton

Rubber Mill Machinery
Farrel-Birmingham Company Inc Ansonia

Rubber—Molded Specialties
Airex Rubber Prod Corp Portland
Canfield Co The H O Bridgeport
Seamless Rubber Company The New Haven

Rubber Products
Airex Rubber Prod Corp Portland

Rubber Printing Plates
Lockwood Sons Inc Wm H Hartford

Rubber Products—Mechanical
Auburn Manufacturing Company The (washers, gaskets, molded parts) Middletown
Canfield Co The H O Bridgeport
Seamless Rubber Company The New Haven

Rubber—Reclaimed
Naugatuck Chemical Division United States Rubber Co Naugatuck

Rubbers
Naugatuck Chemical Div U S Rubber Co (special synthetic) Naugatuck

Rubbish Burners
John P Smith Co The 423-33 Chapel St New Haven

Rust Preventives
Anderson Oil Co Inc F E Portland
Enthone Inc New Haven

Rust Removers
Enthone Inc New Haven

Saddlery
The Smith-Worthington Saddlery Co Hartford

Safety Clothing
American Optical Company Safety Products Division Putnam

Safety Fuses
Ensign-Bickford Co The (mining & detonating) Simsbury

Safety Gloves and Mittens
American Optical Company Safety Products Division Putnam

Safety Goggles
American Optical Company Safety Products Division Putnam

Safety Switches
Trumbull Components Department, General Electric Co Plainville

Saw Blades—Hack
Capewell Mfg Co The Hartford

Saw Blades—Hack & Band
Capewell Manufacturing Company Hartford

Saws, Band, Metal Cutting
Atlantic Saw Mfg Co New Haven

Scissors
Acme Shear Company The Bridgeport

Screens
Hartford Wire Works Co The (Windows, Doors and Porches) Hartford

Screw Caps
Weimann Bros Mfg Co The (small for bottles) Derby

Screw Machines
H P Townsend Mfg Company The Elmwood

Screw Machine Products
Accurate Screw Products Inc (B & S Swiss & Davenports) Southington
Apex Tool Co Inc The Bridgeport
Auto Electric Screw Machine Co Inc Bridgeport
Blake & Johnson Co The Waterville
Consolidated Industries West Cheshire
Dependable Automatic Screw Co Waterbury
Eastern Machine Screw Corp The Truman & Barclay Sts New Haven
Fairchild Screw Products Inc Winsted
Franklin Screw Machine Co The (up to 1½" capacity) Hartford
Garthwait Mfg Co A E (up to and incl ½") Waterbury
Greist Mfg Co The (Up to 1½" capacity) New Haven
Horberg Grinding Industries Inc (Heat treated and ground type only) 19 Staples Street Bridgeport
Humason Mfg Co The Forestville
Junior Screw Machine Products Inc West Haven
Kerrin Company West Haven
Lowe Mfg Co The Wethersfield
Main Screw Machine Products (davenport & automatics exclusively) Waterbury

Screw Machine Products (Cont.)
Meriden Precision Screw Products Co Meriden
National Automatic Products Company The Berlin
Nelson's Screw Machine Products Plantsville
New Britain Machine Company The New Britain
New Haven Screw Machine Prods Inc (up to 1½" capacity) Milford
Olson Brothers Company (up to ¾" capacity) Plainville
Olson & Sons R P Southington
Peck Spring Co The Plainville
Plume & Atwood Mfg Co The Thomaston
Scovill Manufacturing Company Waterbury 91
United Screw Machine Co Thomaston
Waterbury Machine Tools & Products Co (Brown & Sharpe and Davenport) Waterbury

Screw Machine Tools
American Cam Company Inc (Circular Form Tools) Hartford
Pratt & Whitney Co Inc (Reamers, Taps, Dies, Blades and Knurls) West Hartford
Somma Tool Co (precision circular form tools) Waterbury

Screws
American Screw Company Willimantic
Atlantic Screw Works (wood) Hartford
Blake & Johnson Co The (machine and wood) Waterville
Bristol Company The (socket set and socket cap screws) Waterbury
Clark Brothers Bolt Co Milldale
Eagle Lock Co The Terryville
Holo-Krome Screw Corporation The (socket set and socket cap) West Hartford
Scovill Manufacturing Company Waterbury 91
Superior Manufacturing Co The Winsted

Screws—Socket
Allen Manufacturing Company The Hartford
Bristol Co The Waterbury
Holo-Krome Screw Corp The West Hartford

Sealing Tape Machines
Better Packages Inc Shelton

Service Entrance Equipment
Trumbull Components Department, General Electric Co Plainville

Sewing Machines
Greist Mfg Co The (Sewing Machine attachments) 503 Blake St New Haven
Merrow Machine Co The (Industrial) Hartford
Singer Manufacturing Company The (industrial) Bridgeport

Shaving Soaps
J B Williams Co The Glastonbury

Shears
Acme Shear Co The (household) Bridgeport

Sheet Metal Products
American Brass Co The (brass and copper) Waterbury
Dresser Products Inc (Fabricators) Canaan
Merriam Mfg Co (security boxes, fitted tool boxes, tackle boxes, displays) Durham
Charles Parker Co (sheet metal fabricators) Meriden
Parsons Co Inc W A (fabricators) Durham
Plume & Atwood Mfg Co The Thomaston
United Manufacturing Co Division of The W L Maxson Corp Hamden

Sheet Metal Stampings
American Brass Company The Waterbury
American Buckle Co The West Haven
DooVal Tool & Mfg Inc The Naugatuck
Dresser Products Inc Canaan
J H Sessions & Son Bristol
Patent Button Co The Waterbury
Plume & Atwood Mfg Co The Thomaston
Scovill Manufacturing Company (aluminum, brass, bronze, copper, nickel silver, steel and other metals and alloys) Waterbury

Shell Cores
Victors Brass Foundry Inc Guilford

Shell Molding
Victors Brass Foundry Inc Guilford

Shells
Scovill Manufacturing Company (aluminum, brass, bronze, copper, nickel silver—drawn, stamped—electric socket, screw) Waterbury
Wolcott Tool and Manufacturing Company Inc Waterbury

Shipment Sealers
Better Packages Inc Shelton

Showcase Lighting Equipment
Wiremold Company The Hartford

Signals
H C Cook Co The (for card files) 32 Beaver St Ansonia

Signs
Berger Sign Co (neon electric-porcelain enamel-stainless steel) Hartford

Silk Screen Process Printing
Norton Co B H New Haven

Silk Screen Printing
Sirocco Screenprints New Haven

Silk Screening on Metal
Merriam Mfg Co (Displays and Specialties, to order) Durham

Silver & Gold Plating
Donham Craft Inc (on metals & plastics) Thomaston

Simulators
Reflectone Corporation The Stamford

Sintered Metal Products
Raybestos Division of Raybestos-Manhattan Inc Bridgeport

Sizing and Finishing Compounds
American Cyanamid Company Waterbury

Slide Fasteners
G E Prentice Mfg Co The Kensington
North & Judd Manufacturing Co New Britain
Scovill Manufacturing Company (GRIPPER zippers) Waterbury

Slings
American Steel & Wire Div of U. S. Steel New Haven

Smoke Stacks
Bigelow Company The (steel) New Haven
Norwalk Tank Co The South Norwalk

Snap Fasteners
Scovill Manufacturing Company (GRIPPER snap fasteners) Waterbury

Soap
J B Williams Co The (industrial soaps, toilet soaps, shaving soaps) Glastonbury

Special Machinery
Banthin Engineering Company (complete and/or parts) Bridgeport
Boesch Mfg Co Inc Danbury
Black Rock Mfg Company The Bridgeport
Farrel-Birmingham Company Inc Ansonia
Federal Machine & Tool Co Bristol
Fenn Mfg Co The Newington
Hartford Special Machinery Co The Hartford
H P Townsend Mfg Company The Elmwood
National Sheradizing & Machine Co (mandrels & stock shells for rubber industry) Hartford
Swan Tool & Machine Co The Hartford

Special Parts
Fenn Mfg Co The Newington
Greist Mfg Co The (small machines, especially precision stampings) New Haven
J H Sessions & Son Bristol

Spinnings
Gray Manufacturing Company The Hartford

Spline Milling Machines
Townsend Mfg Co The H P Elmwood

Sponge Rubber
B F Goodrich Sponge Products Division Shelton

Spotwelding
Spotwelders Inc (aluminum, steel, magnesium, titanium & alloys) Stratford

Spray Painting Equipment and Supplies
Lea Manufacturing Co The Waterbury

Spring Coiling Machines
Torrington Manufacturing Co The Torrington

Spring Presses
Townsend Mfg Co The H P Elmwood

Spring Units
Owen Silent Spring Division American Chain & Cable Company Inc Bridgeport

Spring Washers
Barnes Co The Wallace Div Associated Spring Corp Bristol

Springs—Coil & Flat
Barnes Co The Wallace Div Associated Spring Corp Bristol
Barrett Co William L Bristol
Bristol Spring Manufacturing Co Plainville
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville
Newcomb Spring Corp The Southington
New England Spring Manufacturing Company Unionville
Peck Spring Co The Plainville

Springs—Flat
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville

Springs—Furniture
Owen Silent Spring Division American Chain & Cable Company Inc Bridgeport (Advt.)

Springs—Wire
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Colonial Spring Corporation The Hartford
Connecticut Spring Corporation The (compression, extension, torsion) Hartford
Foursome Manufacturing Co Bristol
Humason Mfg Co The Forestville
D R Templeman Co (coil and torsion) Plainville
J W Bernston Company (coil and torsion) Plainville
Newcomb Spring Corp The Southington

Springs, Wire & Flat
Autoyre Company The Oakville

Sprinklers
Scovill Manufacturing Company (GREEN SPOT) Waterbury

Stamped Metal Products
American Brass Company The Waterbury

Stampings
C & H Mfg Co Inc Watertown
Donahue Mfg Co Inc Watertown
DooVal Tool & Mfg Inc The Naugatuck
Foursome Manufacturing Co Bristol
Plume & Atwood Mfg Co The (small) Thomaston
Saybrook Manufacturing Inc Old Saybrook
Scovill Manufacturing Company aluminum, brass, bronze, copper, nickel silver, steel and other metals and alloys—automotive, electrical, radio, etc.—deep drawn, enameled) Waterbury
Stanley Pressed Metal New Britain

Stampings—Small
Acme Shear Co The Bridgeport
Barnes Co The Wallace Div Associated Spring Corp Bristol
Barrett Co William L Bristol
Bristol Spring Manufacturing Co Plainville
Greist Manufacturing Co The New Haven
Humason Mfg Co The Forestville

Stamps
Hoggson & Pettis Mfg Co The (steel) 141 Brewery St New Haven
Parker Stamp Works Inc The (steel) Hartford

Stationery Specialties
American Brass Company The Waterbury

Steel
Stanley Works The (cold rolled strip) New Britain

Steel Castings
Farrel-Birmingham Company Inc Ansonia
Hartford Electric Steel Corp The (Carbon, low alloy and stainless steel and Ductile iron) Hartford
Malleable Iron Fittings Co Branford
Nutmeg Crucible Steel Co Branford

Steel—Cold Rolled Spring
Barnes Co The Wallace Div Associated Spring Corp Bristol

Steel—Cold Rolled Stainless
Ulbrich Stainless Steels Wallingford
Wallingford Steel Company Wallingford

Steel—Cold Rolled Strip and Sheets
American Steel & Wire Div of U S Steel New Haven
Detroit Steel Corporation New Haven
Wallingford Steel Company Wallingford

Steel Goods
Merriam Mfg Co (sheets products to order)

Steel—Hot Rolled Strip
Northeastern Steel Corp Bridgeport

Steel Rolling Rules
Waterbury Lock & Specialty Co The Milford

Steel Strapping
Stanley Works The New Britain

Stereotypes
New Haven Electrotype Div Electrographic Corp New Haven

Stop Clocks, Electric
H C Thompson Clock Co The Bristol

Storage Batteries
R A E Storage Battery Mfg Co Glastonbury

Straps, Leather
Auburn Manufacturing Company The (textile, industrial, skate, carriage) Middletown

Structural Mouldings
Leed Co The H A Hamden

Studio Couches
Waterbury Mattress Co Waterbury

Super Refractories
Mullite Refractories Company The Shelton

Surface Metal Raceway & Fittings
Wiremold Company The Hartford

Surgical Dressings
Acme Cotton Products Co Inc East Killingly
Seamless Rubber Company The New Haven

Surgical Rubber Goods
Seamless Rubber Company The New Haven

Swaging Machinery
Fenn Mfg Co The Newington

Switchboards
Distribution Assemblies Department, General Electric Co Plainville

Switchboards Wire and Cables
Rockbestos Products Corp (asbestos insulated) New Haven

Switches—Electric
General Electric Company Bridgeport

Synthetic Resins
American Cyanamid Co (Textile Resins, Paper Resins) Waterbury

Tabulating Equipment—Manual
Denominator Company Inc Woodbury
Veeder-Root Incorporated Hartford

Tanks
Bigelow Company The (steel) New Haven
Comco Inc Div of Enthone Inc (steel, alloy and lined) New Haven
Connecticut Welders Inc (steel, alloy & lined) Wallingford
Foy Electro-Chemical Co (Metal & Plastic) Ansonia
Norwalk Tank Co The South Norwalk
Rolock Inc (Alloy) Fairfield
Storts Welding Company (steel and alloy) Meriden

Tap Extractors
Walton Company The West Hartford

Tape
Russell Manufacturing Company The (woven cotton and woven glass tape) Middletown

Tapes—Industrial Pressure Sensitive
Seamless Rubber Company The New Haven

Tape Recorders
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Tape Recorder Magazines
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Taps
Pratt & Whitney Co Inc West Hartford

Tarred Lines
Brownell & Co Inc Moodus

Telemetering Instruments
Bristol Co The Waterbury

Telephone Answering & Recording Machines
Conn Telephone & Electric Corp Subsidiary of Great American Industries Inc Meriden

Television—Radio
Junior Screw Machine Products Inc West Haven

Testers-Insulation
McNeal J D New Haven

Testers—Insulation Wire & Cable
Davis Electric Company Wallingford

Testers—Non-Destructive
Sperry Products Inc Danbury

Textile Machinery
Merrow Machine Co The 2814 Laurel St Hartford

Textile Printing Gums
Polymer Industries Inc Springdale

Textile Processors
American Dyeing Corporation (rayon, acetate, nylon, dacron, other synthetics) Rockville

Thermometers
Bristol Co The (recording and automatic control) Waterbury
Manning Maxwell & Moore Inc Stratford

Thermostats
Bridgeport Thermostat Company Inc (automatic) Bridgeport

Thin Gauge Metals
Plume & Atwood Mfg Co The Thomaston
Thinsheet Metals Co The (plain or tinned in rolls) Waterbury

Thread
American Thread Co The Willimantic
Belding Heminway Corticelli Putnam
Max Pollack & Co Inc Groton and Willimantic
Wm Johl Manufacturing Co Mystic

Thread Chasers
Geometric Tool Division, Greenfield Tap & Die Corp New Haven

Thread Gages
Pratt & Whitney Co Inc West Hartford

Thread Milling Machines
Pratt & Whitney Co Inc West Hartford

Thread Rolling Machinery
Hartford Special Machinery Co The Hartford

Threading Machines
Grant Mfg & Machine Co The (double and automatic) Bridgeport

Timers, Interval
A W Haydon Co The Waterbury
H C Thompson Clock Co The Bristol
R W Cramer Company Inc The Centerbrook
Rhodes Inc M H Hartford

Timing Devices
B & N Tool & Engineering Co (development and model work) Oakville
R W Cramer Company Inc The Centerbrook
A W Haydon Co The Waterbury
Lux Clock Manufacturing Company Waterbury
Rhodes Inc M H Hartford
Seth Thomas Clocks Thomaston
United States Time Corporation The Waterbury

Timing Devices & Time Switches
A W Haydon Co The Waterbury
Lux Clock Manufacturing Company Waterbury
M H Rhodes Inc Hartford

Tinning
Thinsheet Metals Co The (non-ferrous metals in rolls) Waterbury
Wilcox-Crittenden Div North & Judd Mfg Co Middletown

Tokens
Scovill Manufacturing Company (bus, street car and subway fare) Waterbury

Tool Chests
Vanderman Manufacturing Co The Willimantic

Tool Hardening
Commercial Metal Treating Co Bridgeport

Tools
B & N Tool & Engineering Co (dies, jigs, fixtures, sub-press and progressive) Oakville
Hoggson & Pettis Mfg Co The (rubber workers) 141 Brewery St New Haven

Tools & Dies
C & H Mfg Co Inc Watertown
Lambro Tool-Die & Mfg Co Bridgeport
Metropolitan Tool & Die Hartford
Moore Special Tool Co Bridgeport
Swan Tool & Machine Co The Hartford

Tools, Dies & Fixtures
Greist Mfg Co The New Haven

Tools, Dies, Jigs & Fixtures
Lyons Tool & Die (modelwork, jig boring) Meriden
O.S.A. Manufacturing Co Plainville
Otterbein Co J A Middletown
Riverside Mfg Co Inc The New Haven
Telke Tool & Die Mfg Co New Britain

Tools, Fixtures, Gauges
Fredericks Tool Co J F West Hartford

Toroidal Winding Machines
Boesch Mfg Co Inc Danbury

Totalizers
Reflectone Corporation The Stamford

Toys
Geo S Scott Mfg Co The Wallingford
Gong Bell Co The East Hampton
N N Hill Brass Co The East Hampton
Waterbury Companies Inc Waterbury

Tramways
American Steel & Wire Div of U S Steel New Haven

Transformers
Berkshire Transformer Corp The New Milford
Dano Electric Company Winsted

Trucks—Commercial
Metropolitan Body Company (International Harvester truck chasis and "Metro" bodies) Bridgeport

Trucks—Industrial
George P Clark Co Windsor Locks

Truck—Lift
Excelsior Hardware Co The Stamford
George P Clark Co Windsor Locks

Trucks—Skid Platforms
Excelsior Hardware Co The (lift) Stamford

Tube Bending
Donahue Mfg Co Inc Watertown

Tube Clips
H C Cook Co The (for collapsible tubes) 32 Beaver St Ansonia
Weimann Bros Mfg Co The (for collapsible tubes) Derby

Tube Fittings
Scovill Manufacturing Company (UNIFLARE flared tube and LOXIT compression tube) Waterbury

Tubers
Standard Machinery Co The (tubers for both rubber and plastic industries) Mystic

Tubes—Collapsible Metal
Sheffield Tube Corp The New London

(Advt.)

Tubing
American Brass Co The (brass and copper) Waterbury
Bridgeport Brass Company (brass and copper) Bridgeport
G & O Manufacturing Co (finned) New Haven
Scoville Manufacturing Company (Brass and Copper) Waterbury 91

Tubing—Flexible Metallic
American Brass Co Metal Hose Branch Waterbury

Tubing—Heat Exchanger
American Brass Company The Waterbury
Scovill Manufacturing Company Waterbury 91

Tumbling Barrels
Henderson Bros Co The Waterbury

Tumbling Equipment & Supplies
Esbec Barrel Finishing Corp Beyram
Foy Electro-Chemical Co Ansonia

Tumbling Service
Esbec Barrel Finishing Corp Meriden

Turntables
Macton Machinery Company Inc (industrial & display) Stamford

Typewriters
Royal Typewriter Co Inc Hartford
Underwood Corporation Hartford

Typewriters—Portable
Royal Typewriter Company Inc Hartford
Underwood Corporation Hartford

Typewriter Ribbons and Supplies
Royal Typewriter Company Inc Hartford
Underwood Corporation Hartford and Bridgeport

Ultrasonic Processing Equipment
General Ultrasonics Co The Hartford

Underclearer Rolls
Sonoco Products Co (Climax-Lowell Div) Mystic

Vacuum Bottles and Containers
American Thermos Bottle Co Norwich

Vacuum Cleaners
Electrolux Corporation Old Greenwich
Spencer Turbine Co The Hartford

Valve Discs
Colt's Manufacturing Company Hartford

Valves—Automobile Tire
Bridgeport Brass Company Bridgeport

Valves
Norwalk Valve Company (sensitive check valves) South Norwalk

Valves—Radiator Air
Bridgeport Brass Company Bridgeport

Valves—Relief & Control
Beaton & Caldwell Mfg Co New Britain

Valves—Safety & Relief
Manning Maxwell & Moore Inc Stratford

Vanity Boxes
Bridgeport Metal Goods Mfg Co Bridgeport
Plume & Atwood Manufacturing Co Thomaston
Scovill Manufacturing Company Waterbury

Vapor Degreasing Machines
Foy Electro-Chemical Co (Manual & Automatic) Ansonia

Varnishes
Staminite Corp The New Haven

Vegetable Peelers
Colt's Manufacturing Company Hartford

Velvets
American Velvet Co (owned and operated by A Wimpfheimer & Bro Inc) Stonington
Leiss Velvet Mfg Co Inc The Willimantic
Velvet Textile Corporation The (Velveteen) West Haven

Venetian Blinds
Findell Manufacturing Company Manchester
Jennings Company The S Barry New Haven
New England Shade & Blind Co Inc Durham

Venetian Blind Tape
Russell Manufacturing Company The (woven cotton and woven plastic) Middletown

Ventilating Equipment
Foy Electro-Chemical Co Ansonia

Ventilating Systems
Colonial Blower Company Plainville

Vertical Shapers
Pratt & Whitney Co Inc West Hartford

Vinyl Extrusion & Moulding Compounds
Electronic Rubber Co Stamford

Vises
Charles Parker Co The Meriden
Fenn Manufacturing Company The (Quick-Action Vises) Newington
Vanderman Manufacturing Co The (Combination Bench Pipe) Willimantic

Wall Paper
Stamford Wall Paper Co Inc Stamford

Washers
American Felt Co (felt) Glenville
Auburn Manufacturing Company The (all materials) Middletown
Blake & Johnson The (brass, copper & non-ferrous) Waterville
Clark Brothers Bolt Co Milldale
Humphrey Fabricating Corp Unionville
Plume & Atwood Mfg Co The (brass & copper) Thomaston
J H Rosenbeck Inc Torrington
Saling Manufacturing Company (made to order) Unionville

Washers—Felt
Chas W House & Sons Inc (Mills & Cutting Plant) Unionville

Watches
E Ingraham Co The Bristol
United States Time Corporation The Waterbury

Water Heaters
Whitlock Manufacturing Co The (instantaneous & storage) Hartford

Water Heaters—Electric
Bauer & Company Inc Hartford

Water Heaters—Gas or Kerosene
Holyoke Heater Corp of Conn Inc Hartford

Waxes
Harrison Company The A S (and other protective coatings) South Norwalk

Waxes—Floor
Fuller Brush Co The Hartford

Wedges
Saling Manufacturing Company (hammer & axe) Unionville

Welding
Connecticut Welders Inc (fabrication & repairs) Wallingford
Farrel-Birmingham Company Inc Ansonia
G E Wheeler Company (Fabrication of Steel & Non-Ferrous Metals) New Haven
Industrial Welding Company (Equipment Manufacturers—Steel Fabricators) Hartford

Welding—Lead
Connecticut Welders Inc (tanks & coils) Wallingford
Storts Welding Company (tanks and fabrication) Meriden

Welding Rods
American Brass Company The Waterbury
Bridgeport Brass Company Bridgeport
Bristol Brass Co The (brass & bronze) Bristol

Wells
Church Co The Stephen B Seymour

Wheels—Industrial
George P Clark Co Windsor Locks

Wicks
Auburn Manufacturing Company The (felt, asbestos) Middletown
Holyoke Heater Corp of Conn Inc Hartford

Wiffle Ball
Wiffle Ball Inc The New Haven

Window & Door Guards
Hartford Wire Works Co The Hartford
Smith Co The John P New Haven

Window Shades
New England Shade & Blind Co Inc Durham

Wiping Cloths
Federal Textile Corporation New Haven

Wire
American Brass Company The Waterbury
American Steel & Wire Div of U S Steel New Haven
Atlantic Wire Co The (steel) Branford
Bartlett Hair Spring Wire Co The (hair spring) North Haven
Bridgeport Brass Company (brass and silicon bronze) Bridgeport
Bristol Brass Corp The (brass & bronze) Bristol
Driscoll Wire Co The (steel) Shelton
Hudson Wire Co Winsted Div (insulated & enameled magnet) Winsted
Platt Bros & Co The (zinc wire)
P O Box 1030 Waterbury
Plume & Atwood Mfg Co The (brass, bronze, nickel silver) Thomaston
Scovill Manufacturing Company (Brass, Bronze and Nickel Silver) Waterbury 91

Wire and Cable
General Electric Company (for residential, commercial and industrial applications) Bridgeport
Rockbestos Products Corporation (all asbestos, mining, shipboard and appliance applications) New Haven

Wire Arches & Trellises
Hartford Wire Works Co The Hartford
John P Smith Co The
423-33 Chapel St New Haven

Wire Baskets
Wiretex Mfg Inc (Industrial, for acid, heat, treating and degreasing) Bridgeport

Wire Cloth
Hartford Wire Works Co The Hartford
C O Jeliff Mfg Co The (all metal, all meshes) Southport
Pequot Wire Cloth Co Inc Norwalk
Rolock Inc (Alloy) Fairfield
Smith Co The John P New Haven

Wire Dipping Baskets
Hartford Wire Works Co The Hartford
John P Smith Co The
423-33 Chapel St New Haven

Wire Drawing Dies
Waterbury Wire Die Co The Waterbury

Wire Forming Machinery
Torrington Manufacturing Company The Torrington

Wire Formings
Autoyre Co The Oakville
G E Prentice Mfg Co The Kensington
Master Engineering Company West Cheshire
North & Judd Manufacturing Co New Britain
Turner & Seymour Manufacturing Co The Torrington
Verplex Company The Essex

Wire Forms
Barnes Co The Wallace Div Associated Spring Corp Bristol
Bristol Spring Manufacturing Co Plainville
Colonial Spring Corporation The Hartford
Connecticut Spring Corporation The Hartford
Foursome Manufacturing Co Bristol
Gemco Manufacturing Co Inc Southington
Humason Mfg Co The Forestville
New England Spring Mfg Co Unionville
Templeman Co D R Plainville
Terryville Manufacturing Co Terryville

Wire Goods
American Buckle Co The (overall trimmings) West Haven
Patent Button Co The Waterbury
Scovill Manufacturing Company (To Order) Waterbury 91

Wire Partitions
Hartford Wire Works Co The Hartford
John P Smith Co The
423-33 Chapel St New Haven

Wire Products
Clairglow Mfg Company Portland
Humason Mfg Co The Forestville
Plume & Atwood Mfg Co The (to order) Thomaston

Wire Reels
A H Nilson Mach Co The Bridgeport

Wire Rings
American Buckle Co The (pan handles and tinners' trimmings) West Haven
Humason Mfg Co The Forestville
Templeman Co D R Plainville

Wire Rope and Strand
American Steel & Wire Div of U S Steel New Haven

Wire—Specialties
Andrew B Hendryx Co The New Haven

Wiring Devices
Harvey Hubbell Inc Bridgeport

Wood Scrapers
Fletcher-Terry Co The Forestville

Woodwork
C H Dresser & Sons Inc (Mfg all kinds of woodwork) Hartford
Hartford Builders Finish Co Hartford

Woven Felts—Wool
Chas W House & Sons Inc (Mills & Cutting Plant) Unionville

Yarns
Aldon Spinning Mills Corporation The (fine-wollen and specialty) Talcottville
Ensign-Bickford Co The (jute-carpet) Simsbury
Hartford Spinning Incorporated (Wollen, knitting and weaving yarns) Unionville

Zinc
Platt Bros & Co The (ribbon, strip and wire)
P O Box 1030 Waterbury

Zinc Castings
Newton-New Haven Co Inc 688 Third Ave West Haven (Advt.)

Hydroxolation—A Boon To Industry's Trash Disposal Problem

(Continued from page 9)

ford, Conn. Highly versatile and mobile, they require no supplementary fuel or installations.

The Hydrox-o-lator with its Triple Chamber Construction offers industry, for the first time, the opportunity to eliminate all of its major refuse problems; unsanitary conditions, unsightly conditions, fire hazards and handling costs, and save money as well. Immediate disposal of burnable trash reduces disease spreading potential of rat and fly infested refuse storage areas. Good neighborhood relations are protected when conditions caused by wind scattering trash are eliminated entirely. Fires resulting from unprotected accumulations of trash, rubbish and waste are all major hazards eliminated by immediate disposal. The tremendous cost of rehandling and loading trash and refuse is completely eliminated. Good housekeeping for industry is after all just good common sense since the savings in cost alone make an item which every manufacturer, regardless of size, can not afford to overlook. When this is coupled with the civic and public relations effect on the state as a whole, it would appear to be an item of no mean importance to all concerned.

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Books & Booklets

BRIEF REVIEWS of books and booklets for the business reader. Contributed by the Business & Technical Branch, Hartford Public Library.

INDUSTRIAL POWER SYSTEMS HANDBOOK, edited by Donald Beeman. McGraw-Hill, N. Y., 1955.

Written by a group of General Electric engineers and intended to describe up-to-date power system engineering practices for those who have to do with the planning of electrical facilities for industrial plants or commercial buildings.

HOW TO BUILD PROFIT VALUE IN YOUR SALES DOLLARS, by John D. Corrigan. Ronald, New York, c1955.

A book offering a program for management, and explaining the "law of motiviation" which, if applied, will produce amazing results in the sales force.

A PRIMER OF SOCIAL STATISTICS, by Sanford M. Dornbusch and Calvin F. Schmid. McGraw-Hill, New York, c1955.

An attempt to present statistics to the student who has an inadequate mathematical background. No knowledge of algebra is necessary to understand this primer.

ADVERTISING IN MODERN RETAILING, by Carrie Mills Rowland. Harper, N. Y., c1954.

A book with a down-to-earth approach to retail advertising, and written along general lines. Intended to meet the needs of three groups—students, those already in the profession, and executives.

THE SUPERMARKET, by M. M. Zimmerman. McGraw-Hill, New York, 1955.

"The first complete story of the Super Market as a phenomenal new chapter in America's history of distribution . . . " Pref. The author is founder of the Super Market Institute.

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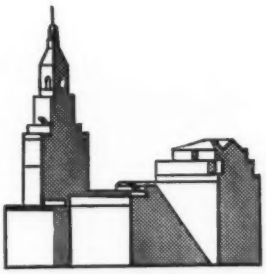

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